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A PSYCHOLOGY OF Growth

by BERT I. BEVERLY, M.D.

*Rush Assistant Professor of Pediatrics
College of Medicine, University of Illinois
Instructor in Psychology, School of
Nursing, Presbyterian Hospital,
Chicago, Illinois*



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A PSYCHOLOGY OF GROWTH

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FIRST EDITION

TO MY WIFE

Preface

THE COURSE in psychology that has been developed during the past fifteen years for the instruction of students at the Presbyterian Hospital School of Nursing, Chicago, Illinois, is the immediate source of most of the material for this book. The purpose of the course has been to give nurses the understanding of themselves and their patients that is essential to a mastery of the art of nursing.

Many clues to adult behavior lie far back in childhood. Every personality is a composite of the attributes with which the individual came into the world and the attitudes and habits of response that he has developed through the years. His problems usually have their origins in his early life. In order to understand him, therefore, it is necessary to study mental growth and development from infancy through childhood and adolescence. Such a course of study not only gives the nurse an insight into the causes of her patients' behavior but, by helping her to trace the origin and development of her own personality characteristics, makes her better able to understand herself and to adjust to her environment.

This is a matter of great importance and no little difficulty. Many students enter nursing school immediately after high school, when they are still in the adolescent period of growth and have to make many personal adjustments to society in general. At this already

Preface

complicated stage of their development, they accept the additional handicap of leaving home, many of them for the first time, and trying to stand on their own feet, meet new situations, and solve problems without the accustomed support of their families. When students nurses enter the hospital they find themselves plunged into a system that is both unfamiliar and complicated. Standards are high, accuracy and precision are essential. Because patients are uncomfortable and frightened, their personality difficulties are exaggerated and they are usually more exacting than the persons with whom the nurses have been accustomed to deal. The students' relations with one another also are complicated by the diversity of their social, religious, and political background and by the inequality of their intellectual capacities, manual dexterity, and emotional maturity.

Although student nurses generally exhibit a remarkable ability to adjust themselves to trying circumstances, it is not reasonable to suppose that any of them can be wholly exempt from personal difficulties. Some are aided by self-confidence, self-reliance, and a feeling of security, while others suffer the handicaps of insecurity, a sense of inferiority, and irrational fears. The school of nursing should be equipped to help them all solve their problems and make their adjustments, both as a means of maintaining their own mental and physical health and to aid them in acquiring skill in caring for their patients and making them comfortable. For this reason, schools of nursing now provide in their curriculums a course in psychology. The most thorough of these courses include not only lectures

Preface

and full class discussion, but also private consultations with the teachers concerning those personal problems that a student may not wish to discuss in class.

While taking full responsibility for the statements in this book, the author is indebted to many colleagues and writers for their ideas and has given credit wherever possible. The most stimulating and most frequently quoted ideas are those of Dr. Franz Alexander, Dr. Arnold Gesell, Dr. Ralph Hamill, Dr. Karl Menninger, Prof. Hughes Mearns, and Dr. Carleton Washburn. The author is indebted to Mrs. Carrie Belle McNeil, Presbyterian Hospital, Chicago, for invaluable aid and cooperation in working with student nurses and is especially indebted to Ruth G. Bergman for editorial assistance and to Doris Thompson for research assistance.

BERT I. BEVERLY.

Chicago, Ill.,
October, 1946.

Contents

<i>Preface</i>	xi
<i>Foreword by Lucile Petry</i>	xiii
1. The Foundation of Mental Health.....	1
2. The Two-Year-Old.....	20
3. Adjusting to Environment.....	31
4. Intelligence	41
5. Mental Deficiency.....	64
6. The School Child.....	79
7. Fears	92
8. Causes of Behavior Problems.....	108
9. Behavior Problems.....	119
10. Preadolescence	147
11. Adolescence	158
12. Juvenile Delinquents.....	186
13. Adults	199
<i>List of Visual Aids</i>	223
<i>Index</i>	233

*A chapter summary is given on
the first page of each chapter.*

Foreword

THE PUBLICATION of such a book as "The Psychology of Growth" and its use by students of nursing constitute recognition of an important human relationship, that between nurse and patient.

For the nurse it is essential that she have scientific and humane understanding of the patient so that her care will stimulate his continuing development to maximum capacity for living. She must understand what makes the patient into the person she finds. This understanding increases her usefulness as a member of the health team whose goal for the patient is preventive, therapeutic, or — most commonly — both.

From other sources the student of nursing has learned that at birth the infant possesses a pattern for physical development. From this book she learns, in addition, that he possesses a pattern for the development of mental and emotional health. She learns the characteristics of an environment which educe optimum development of the individual. Two primary attributes of this environment described at length by Dr. Beverly, are "security" and "standards appropriate to the age and characteristics of the individual."

In the care of children, both as mother substitute and as mother adviser, the nurse has a rich opportunity to assure the provision of this security and the appropriateness of these standards. In the care of the adolescent or

Foreword

adult she deepens her understanding of the patient's behavior when she learns the extent of the security given him as a child and his reactions toward the standards held for him or developed by him. Her care of all patients is enhanced by her recognition of the two-way relationship between physiological reactions and intense emotions, rational or irrational. Knowing the psychological effect upon the individual of feelings of optimum security, of exaggerated dependence, or of rejection, the nurse comes to understand the degree of maturity of the patient. The concept of the "neurotic" — a word sometimes improperly used by the nurse — is brought into truer focus. She becomes less liable to errors in judgment and in handling of patients, and she will learn to ease the "inevitable tension that lead to mental and emotional distortions." The role of anxiety and of illogical prejudices in the development of her patient's personality sometimes explains his behavior to her and enables her to give him more effective care.

In addition, the student who uses this book will find fundamentals which will guide her in understanding her own behavior. She is given concepts worthy of thorough study as applicable to herself. The instructor who encourages self-directed learning in her students will provide opportunity for free consideration and manipulation of these concepts by each member of the class. She will stimulate the student's search among the sources listed as references.

Achieving insight into her own reactions will improve the nurse's relationships with her patients, their families,

Foreword

her coworkers, and her friends. The development of an objective attitude toward behavior—her own and that of others — will make her a more effective agent for the promotion of positive health through caring for patients, through health education, and through assumption of effective citizenship activities.

LUCILE PETRY.

The Foundation of Mental Health

Life's patterns are largely determined by ancestry. The vitality, temperament, and potentialities for growth are already present at birth and cannot be changed. Growth takes place according to a definite sequence. The baby acts in the way he feels and immediately begins to form habits of response to his environment. Given security and standards appropriate to his age and individual characteristics, he responds with optimum growth. The feeding schedule is determined by the rhythm of the individual baby. He is given as much food and affection as he wants. He takes responsibility for toilet habits when he is ready.

THE infants now lying in their cribs will one day determine the course of civilization. They will inherit the reins of government, the control of industry, the power within the atom. What use they will make of this tremendous heritage, for good or evil, will depend, in large measure, on the way in which we bring them up and help them to develop their latent abilities.

We cannot go into the nurseries and say unequivocally that this infant is a potential Lincoln, that one an Edison, and the other a good average citizen. We can, however, assess certain physical, mental, and emotional traits that

A Psychology of Growth

should guide us in our approach to each child and help us to care for him in a way that will bring out the best that is in him, insure mental health, and permit him to become a competent, well-adjusted, happy member of society. Conversely, experience tells us that in twenty-five years many of the newborn babies who are now normal and healthy will be suffering from that mental ill-health which is a deterrent to individual success and a drain on social progress. What can we do about this situation?

It is obvious that during a child's infancy his parents (mothers directly and fathers indirectly) are the masters of his fate; but he never entirely throws off the yoke of their influence and for that reason it is essential that they be wise masters. In this incalculably important task they should be able to get valuable help from nurses and physicians, since these are the only professional groups that are in frequent consultation with parents during the children's most formative years. Because of the responsibility that thus rests on professional advisers, it is necessary for them to know what things are essential for mental health and how it can be preserved.

At the outset, they will recognize that a baby's potentialities for development are born, not made. Fortunately, since nature is wiser and more consistent than parents, there is no physical or psychological alchemy by which anyone can change an infant's innate racial or individual characteristics. That is a natural law that man has recognized and accepted submissively in its application to every living thing except children. No farmer expects a pear tree to bear apples; no cattleman hopes that his herds will produce wool. For the same reason, no parent should plan to transform

The Foundation of Mental Health

his stolid, down-to-earth child into a poet, or one who may be color blind into a painter.

The agriculturist, to be sure, has this advantage over the parent: his sapling looks like a pear tree; his calves are unquestionably going to be cattle. To the parent most babies appear much alike. He cannot tell by looking at his newborn child whether he has on his hands a dancer or a mathematician, a singer or a scientist, or any one of a hundred beings that fathers and mothers want their children to be or to avoid becoming. Clues to this mystery are scattered through the family history, but for the complete solution the parent must wait and watch and permit the gradual unfolding of the child's personality. It is a fascinating process and can be made to yield the most satisfying returns if the parent will be patient and will not expect his young pear tree to appear some day wearing apple blossoms.

Just as the farmer knows that he cannot change nature, he realizes that the only way he can improve her handiwork is by collaborating with her. If he enriches the soil and provides water and protection from parasites, he may expect his tree to grow and flourish within the limits set by nature. He will not, however, demand that its sap should rise before spring or that it should bear fruit the first summer. Parents who are equally realistic will not try to force their child to walk before he is ready or to talk at the same age at which his brother talked or to play the violin because the next-door neighbor's child shows musical talent. They will recognize that their baby is what he is, that his pattern of development is predetermined, that they cannot change nature but, if they abet her by enriching the soil, by providing nourishment and protection, they may help the child

A Psychology of Growth

to achieve that sought-after miracle of growth and perfection which can be obtained in no other way.

Life, then, is a growth process beginning with a two-cell organism and continuing at least to senility. The greatest progress that has been made in the understanding of human behavior has resulted from observations of this process. Observations by pediatricians, educators, psychologists, and psychiatrists have contributed to our understanding of human behavior and of the factors that promote mental health and of the causes of mental ill-health. One means of understanding all human behavior, therefore, is to seek it through a consideration of the phenomena of growth.

It is possible to approach the subject through the study of one individual, taking into account only those things which pertain specifically to him, or from the standpoint that "every human being and his whole existence are a link in the long chain of historical evolution, a part of the eternal life stream. In this type of experience, existence is no longer defined by the personal past, instead the impersonal past creates for the individual experience a timeless background, a perspective of 'eternity' and 'immortality'."¹ From the latter point of view it appears that the infant, at birth, is not a new but a very old individual. In Aldrich's words, "each newborn is actually a living replica of the individual that came into the light of day long before the dawn of history."² His behavior reveals the unfolding of patterns developed by the countless generations of his forebears; he will pass them on to the generations to come.

Before birth, growth proceeds at an enormously rapid rate. The two cells of the original organism separate and differentiate and, at the same time, synthesize and coordi-

The Foundation of Mental Health

nate their functions. There is a division into cell groups, which multiply and form organs. Each group of differentiated and integrated organs forms a system and the various systems make up an individual as a whole. In the end, the two cells become six billion cells, each with metabolic processes and established behavior within itself and in relation to all the other cells of the body. There are, then, cells, organs, and finally an individual behaving according to a specific plan. In psychology, we are interested primarily in the central nervous system, but we must remember that each system influences all the others. A new field, psychosomatic medicine, has to do with the effect of the central nervous system on the other systems. Obviously, the other systems often affect the central nervous system.

Growth takes place from within. We cannot add to a child's stature by grafting flesh on his bones, nor can we increase his mental capacity by trying to force knowledge into his head. The process is much simpler than that. We give him food and physical care and he responds with bodily growth; we give him affection and supply his intellectual needs and he responds with mental growth. If we withhold this nourishment we may stunt his frame and distort his mind; otherwise, we cannot change his characteristics.

Each individual is endowed with growth energy and is motivated by inherent drives. He has a lifetime storage battery that stimulates growth and the unfolding life patterns. This force, which may be called aggression or vitality, is normally constructive and capable of producing optimum growth.

His rate of growth also is established and we can alter it only in an unfavorable way; that is, we may retard it, but

A Psychology of Growth

we cannot appreciably hasten it. . Growth takes place in an orderly manner, according to a specific pattern. Every muscle is formed by a regular process and in a precise sequence. Behavior traits grow like an automobile on an assembly line. Nature is the master designer; if we try to change her plans, the result is a faulty product; it is only by helping her to carry out her plans to perfection that we can be said to take the best possible care of the infant and the growing child. We can, however, supply the kind of care that he needs in order to attain the best possible health and develop his native, irrevocable powers to a maximum degree. This care begins at birth and its continuance during the child's first few years is extremely important, since infancy is the period when he forms the emotional patterns that will serve him throughout life.

A baby is born with a mechanism for response to his environment. He reacts in terms of feeling; that is, he acts in the way he feels. Feelings are the conscious manifestations of emotions, which, in turn, represent instincts or life energy, the basic drives motivating all life processes. Under certain conditions an individual feels frightened; under others, resentful. When his emotional needs are met, he feels satisfied and responds with confidence and complacence.

Satisfaction of his specific needs also permits a child to achieve maximum growth. For bodily growth he requires adequate food and physical care; for mental growth he needs security and an opportunity to do things appropriate to his age and ability. Security is a feeling that is given to a child from birth by parents—particularly by a mother—who wanted him in the first place and now accept him as

The Foundation of Mental Health

he is. It is a feeling of confidence and trust and all-rightness, which grows deeper and stronger and more sustaining as parents manifest their willingness to permit him to develop in accordance with his individual pattern and with those standards which conform to his own capacity and level of growth. Coupled with these attitudes, the child must always have the satisfaction of doing those things of which he is capable without being retarded or pushed to reach some artificial standard or to fit some preconceived idea on the part of the parents. When these basic needs are fulfilled, the child can adjust himself to his environment, can develop the self-confidence that he needs to form habits of responsibility, and can grow up to be a reliant and reliable individual.

All behavior is expressed in terms of habit. Thus the infant, from birth, forms the habit of responding to his environment with satisfaction and complacency on the one hand, and with fear and resentment on the other. The former pattern, if it becomes dominant, leads to mental health, the latter to mental ill-health. However, there are justifiable fears and resentments, emotional responses that represent the instinct of self-preservation and are therefore vital to the individual's existence. The child who reaches maximum growth, which means mental health, is able to experience the self-confidence that will allow him to meet situations in an intelligent manner. This goal is not always reached, but it should be our aim in rearing children.

The infant is a selfish little animal, concerned only with his own growth needs. He is controlled by those primitive drives which are primarily concerned with self-propagation

A Psychology of Growth

and self-preservation. At the same time, he is confronted by a complex and complicated society which, in his adult life, will demand the curbing and sublimation of a part of his impulses to conform to the high standards of civilization. This would create a critical situation if it were not that adaptability is one of the salient characteristics of the human organism. This adaptability, however, is part and parcel of the growth process; it is slow and continuous, and twenty or twenty-five years is a short period in which to achieve it.

In early infancy, the child is passive in his demands, that is, when his needs are not supplied he cries; but as he learns to use his body, and as his intelligence grows and his emotions mature, he tries to gain satisfaction by more active efforts. Since he is growing and using his constantly increasing abilities, he becomes more aggressive in his attempts to satisfy his inner cravings, and in this he is successful, provided that his environment does not present too many obstacles. If too much is expected of him he becomes frightened and resentful and his aggressiveness may become partly destructive instead of being the constructive element that is necessary for success. Then, because his conscience causes him to feel a sense of guilt, his destructiveness may be partially turned against himself and he will do things that harm rather than help him in his efforts. Menninger says, "If we can imagine a parent sufficiently skillful to replace each satisfaction of which the child is deprived by another satisfaction that the child could accept as approximately equivalent, without disloyalty to the requirements of reality, we should expect to see in the progeny of such a parent an ideal person, not one without aggression but one without a sense of being thwarted in the

The Foundation of Mental Health

adventures of life, and without hate for anything except those things which should be hated and fought against in defense of his own ideals and best interests.”³

At first thought, these fundamentals seem to be too simple; yet they are the principles around which the human race has developed during the countless centuries it has been in existence. It is only since society has become more complex and the individual has therefore encountered greater difficulty in adjusting to its standards that parents have tried different methods of rearing children and that mental ill-health has increased. If we go back to the beginning of history, we find that self-preservation and the protection of the family were the sole business of the father; the mother cared for the child, keeping him close in infancy, providing him with food, water, and warmth and permitting him to set his own pace for performing new acts and learning new skills. Even though society has undergone marked changes since our ancestors lived in caves and tents, babies have remained very much the same. We find that the young baby who was born yesterday is unhappy unless he is close to his mother for a considerable part of the time and receives the same care that the primitive woman bestowed on her child thousands of years ago. Changes in the rules for rearing children, therefore, reside in the details rather than in the fundamentals and are not necessitated by alterations in the human race but only by the increasing intricacy of civilization, which makes it necessary for us to use greater care in rearing children so that they can “take it.”

With these general statements in mind, let us now go into the hospital and observe a group of babies. Most of them are sleeping, but their sleep is not quiet or continuous.

A Psychology of Growth

Their breathing is rapid, then slow and shallow. For a short time they lie still, apparently sleeping deeply; then they partly waken, tense their muscles, pull up their arms and legs, wince, and go back to sleep. These actions are performed by their bodies as a whole; there are no movements of individual muscle groups. Their crude movements are indexes of the immaturity of the babies. Their nervous systems are still in the process of development; their nerve pathways are not complete and the nerve sheaths are not fully formed.

From time to time, different babies will cry. It may be because they are hungry, in pain, too warm or too cold, or wrapped too tightly. A sense of falling or a loud noise startles them and causes them to cry. A nurse picks up one of the wailing babies and in a moment or two he is quiet. Studies by Dr. C. Anderson Aldrich and his associates⁴ at the Mayo Clinic indicate that the amount of crying is inversely proportionate to the number of nurses on duty; when the babies are picked up more frequently, they cry less. They cry when they are separated from their mothers for too long a time.

A baby is equipped at birth with several important reflexes. As soon as he is born, he automatically begins to breathe. Nor does anyone have to teach him how to nurse. When his cheek is placed against the mother's breast, he reaches for the nipple and sucks. X-ray films have demonstrated that babies sometimes suck their thumbs or fingers before birth. The reflex response to pain is well known. In every normal baby the Moro, or startle, reflex is also present. It is produced by a loud noise or a sense of falling, which causes the infant to become rigid, thrust his arms forward in an arc, make clutching motions with his fingers,

The Foundation of Mental Health

and utter a despairing cry. In the distant past this reflex was related to self-preservation and still expresses protest against minor insults. It is absent in cases of birth injury or irritation of the brain from other causes.

These are elements that are common to all babies, but as we observe the occupants of the nursery one by one on the examining table we find certain marked differences, notably in size, build, and behavior. This one, who is diminutive in stature, has small parents and will probably follow the family pattern. The next infant is relatively tall and large-boned. He may become a big man, like his football-playing father. Scientific investigations of growth indicate that children are likely to follow these patterns, notwithstanding nutritional advantages or disadvantages.

Similarly, we can ascertain some of the mental potentialities of these very young persons before us. The nurse tells us that this one tried to nurse, the day he was born. In so doing, he passed his first intelligence test and gives us reason to believe that he is normal mentally. By smiling before he leaves the hospital, or within the next few weeks, he strengthens our confidence in his intelligence. The next baby whom we examine causes us grave concern, because he is two or three days old and has not yet tried to suck. For that reason we must consider the possibility of a brain injury or lack of brain development. The intelligence or lack of intelligence of these two babies will continue throughout their lives. At this early stage of their development, we cannot say that some of the babies in the nursery are endowed with musical ability and that others will show mechanical aptitude; but even such characteristics may be tentatively deduced on the basis of family histories.

Different degrees and types of emotional response also

A Psychology of Growth

appear while we have these babies on the examining table. We can test their reactions by extending their legs and holding them firmly. One infant is not greatly concerned; one cries mildly when he is held too long; a third protests more vigorously, but stops as soon as he is released; while another becomes tense, cries violently and continues to wail after he is released. Each infant will behave in the same manner when his face is turned away from the mother's breast after he has been nursing only a few minutes. These responses to unpleasant situations are constant for each infant and may continue throughout life. (Sufficient observations for proving this idea have not yet been made.) The last-mentioned infant, for example, will react violently whenever he is displeased. This reaction *must* be accepted; it cannot be changed. It may be designated as the temperament of the individual.

Thus we see that each baby at birth has a well-developed and functioning mechanism by means of which he responds in terms of feeling to his environment. When his physical and emotional needs are satisfied, he is quiet; otherwise, he is restless and cries.

Provided that we satisfy the baby's essential needs previously described, we shall see his growth patterns slowly unfold and shall have the pleasure of observing how his abilities increase and adapt themselves to a more complex environment. But the parents are entitled to some specific information, in order that they may know what to expect of their child. They need to learn his characteristics and the program that they should follow. Because of the close relationship between physiological functions and emotional satisfactions, it is important to adjust feeding and other

The Foundation of Mental Health

health schedules to the emotional needs of each individual infant. We should consider the child as a whole, so that both the physical and the mental aspects of his growth will receive attention.

The emotional outlets of the baby are confined largely to feeding, fondling, elimination, and warmth. It is important, therefore, that these satisfactions, which have physical, physiological, and emotional aspects, should receive careful consideration, from both a physical and a mental standpoint.

FEEDING

In regard to feeding we should keep in mind a few important facts. First of all, a baby is given more security from breast feeding than from any other source. It provides an intimate relationship between the mother and the child and is reassuring to the infant, who at birth was suddenly separated from the mother's being. If a mother is not able to nurse her baby, she should take him in bed with her and hold him in her arms while giving him the bottle. During the time that they are in the hospital, therefore, every baby on a bottle should be *carried* to his mother ("banana wagons" are out) at each feeding time. At all ages, children should be offered food—never be fed. From birth forward all well, normal children eat a sufficient amount of food to maintain health and promote growth. Only the child himself can determine the quantity of food he desires or needs. When the stomach is empty, painful contractions, together with sensations that come from body needs for food, stimulate hunger. When the stomach is filled with an amount of food that satisfies these physio-

A Psychology of Growth

logical needs, hunger disappears. In addition to acquiring food, however, sucking provides an emotional satisfaction. That is the reason why all babies suck their thumbs and they should be allowed to do so. As their emotional needs are met in other ways, they give up thumb sucking with the bottle (at the age of from one to two years), returning to the habit only when they are tired or angry, and then only for short periods. ·

The feeding interval depends upon the baby himself. Each baby comes into the world with a fairly regular sleeping and waking schedule (rhythm) of his own. He usually sleeps about three, three and a half, or four hours at a time, or perhaps three hours for the daytime naps and four for those at night. From careful observations, Gesell⁵ found that babies awaken less often during the night than during the day. At the end of each interval, the baby wakes up and cries. If he is fed, fondled, and made comfortable, he soon goes back to sleep. Especially during the first few weeks of life, it is important to adapt the feeding schedule to this individual waking rhythm, regardless of the irregularity of the program. Such a schedule is never regular, because the rhythm cannot conform to a time schedule and at best can only approximate a three-, three-and-a-half-, or four-hour program.

A four-hour baby (that is, one who eats at intervals ranging from three and a half to four and a half hours) who is permitted to determine his own feeding schedule will usually give up the night feeding during the first four or five weeks. In other words, he will not wake up, and the mother may omit the feeding. The three-hour infant will be likely to continue on his original schedule for several weeks. When

The Foundation of Mental Health

the mother reports that he does not seem hungry, the doctor will know that he is probably ready for a four-hour schedule, and at six to ten months of age it will likely be discovered that the time has come for a three-meals-a-day schedule.

Infants readily learn to take food from a teaspoon if it is offered to them before they are five months old. At six or seven months, when they like to put things in their mouths, they may be offered milk from a cup each day. If they are not hurried, they will learn to prefer the cup to the bottle and, in most cases, will give up the latter when they are between the ages of ten and twenty-four months. Most children from thirteen to fifteen months of age have a desire to feed themselves and can master the art in a few months.

At fifteen months, then, we may find a child on a three-meal schedule, feeding himself (with, perhaps, a little help and an abundance of patience on the part of the adult in charge), and eating a sufficient amount of food for health and gain. He may have given up the bottle or will soon do so. He has developed these important health habits without restriction or force, but as a result of having had an original food schedule that conformed with his own rhythm and was adjusted from time to time as his growth needs changed. This fact may be considered as an illustration of progressive education.

AFFECTION


Parents want to know how much affection they should show their babies. This is an important question and deserves a specific answer. (1) We should emphasize the fact that security, of which affection is a part, should be

A Psychology of Growth

given the baby continuously by the mother or by one mother substitute, that is, the infant should be cared for by the same person day after day, and not by one and then another. (2) The quality of the affection is more important than the quantity. The best kind of affection is given by a mother who needs the baby as badly as he needs her. It is not given from a sense of duty and is not forced, as in the case of a mother who is unduly fatigued, but is bestowed spontaneously and without anxiety. (3) The amount of affection is inversely proportional to the age of the infant. During the first weeks of life the infant should be close to his mother, much more so than when he is older. In general, a child should receive as much loving attention as he wants, but should not be used as an emotional outlet by parents and other adults. Fondling, up to, but not beyond the point of fatigue at each feeding period, is usually sufficient.

A comfortable rocking chair is an essential adjunct to the nursery. When that is supplied, the nurse or the mother can rock the baby during and after his feeding. He knows how much fondling he wants and will soon communicate his wishes to the person holding him so that she will know when he has had enough and is ready to go back to his bed. If she misinterprets the signals and the baby cries for more attention, she should hold him for a longer period. In order to make the baby feel secure, affection should be given largely by one individual, preferably his mother; he cannot be passed around for the pleasure of the friends and relatives. The mother need not be disturbed about the possibility of spoiling the baby by following this method. Spoiling is a different matter, which we will discuss later.

TOILET TRAINING

Toilet training should start as soon as the infant is ready for it. That time comes when he is old enough to understand the use of the toilet, generally at the age of twelve to fifteen months, if his emotional growth has reached the point where he enjoys this accomplishment and wishes to take on the responsibility for it. The mother or the nurse should then place him on a comfortable toilet (preferably, a small chair with a comfortable footrest) at the time of day when he usually has a bowel movement. She may massage his abdomen lightly. If she praises him for a new accomplishment and treats his failure with unconcern, he will soon get so much more satisfaction from using the toilet than from soiling his diaper, that he will take the responsibility for this habit. When he fails to do so, it is because he is not ready or the efforts to hurry him have been too great. 

Most children train themselves for bowel movements during the day, at the age of twelve to eighteen months, and remain dry at twelve to eighteen months. They usually discontinue bed wetting when they are between eighteen and thirty-six months of age. It is important to remember that children accept these responsibilities when they are ready, when they want to, and not before. If the child is allowed to take responsibility (toilet training, for example) when he is ready (grown sufficiently), the function will not assume undue importance in his mind. If the training is started too early and too vigorously, it will assume proportionately greater importance in the individual's mind throughout life.

RELATIONSHIP TO OTHERS

During the first few months, an infant will not actively rebel when he is held by someone other than his mother, unless the situation is too strange and he is held awkwardly and uncomfortably. He will apparently accept mother substitutes contentedly if there are not too many. At about the age of six months, however, his mind is sufficiently developed so that he can distinguish between individuals. When this occurs, he nearly always cries at the approach of unfamiliar persons. He begins to show real anxiety when he is separated from his mother. This is well illustrated by his wails when he is taken to a physician's office for routine examination. The nurse and the physician can modify this behavior by the manner in which they handle the baby. Just as his protests will be violent if he is held in such a way that he cannot move, so they will decrease if he is permitted to sit on his mother's lap or if she or the nurse holds him during the examination. From these observations it becomes evident that the baby does not cry solely as a result of the inoculations he receives in the doctor's office, but also because of his natural feeling of insecurity when strangers approach, and especially if they take him from his mother.

A mother, to be sure, cannot remain with her baby constantly, but when she is obliged to be away from him it is best to have her place taken by the same individual every time. The baby feels more secure when he is cared for by his mother and, in her absence, by the one substitute. It follows that parents who employ a nurse for their baby should be extremely careful to find one who has the emo-

The Foundation of Mental Health

tional attributes of a good mother, as already described, and should keep her throughout the child's infancy. Likewise, when it is necessary to place the infant or small child in the hospital, he should have the same nurse during his entire stay and that nurse should be one who really wants to care for children and likes this particular patient.

The resistance to outsiders reaches a maximum when the child is between the ages of eighteen and twenty-four months. After that it gradually decreases. At the time the child is thirty to thirty-six months of age, he should be ready to accept strangers and cooperate with them. If he does not give this cooperation, it is probable that there is something wrong with his program.

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The Two-Year-Old

Growth patterns are fairly well established. The child now learns to speak in sentences, walks, plays; he is happy and has acquired the self-confidence that results from doing things. Retention of his normal mental qualities is most important in any disciplinary program. A child of this age cannot reason, in the adult sense.

BY THE time that the baby has reached the age of two, he has passed his most rapid and important period of growth. Even though he evidences little desire to cooperate with strangers and other children and requires frequent praise from his nurses and parents, he has progressed far enough physically, intellectually, emotionally, and socially so that it is possible to determine his growth patterns and assess his potentialities and abilities more accurately. Physically, he has a well-defined structure; that is, he is tall or short, small-boned or large, well coordinated, or clumsy, possessed of a sense of rhythm or devoid of it. He has learned to sit up, stand, toddle, walk, run, and climb stairs. Usually he speaks in sentences. According to the Gesell scale, the average child of this age can build a tower of six blocks, string beads with a needle, help dress and undress himself. He is able to distinguish black from white, but he does not discriminate between colors, even though he may know the color names.

All this behavior indicates that the child has gone through a long sequence of growth processes. In the matter of speech, for example, he started by making noises with his lips, mouth, nose, and throat. Later, some of these sounds began to take on meaning. At the age of three or four months, when he was able to recognize individuals, he evidenced happiness by laughing and cooing. As time went on, his laughing and cooing became more expressive. In course of further mental, physical, physiological, and emotional growth, he learned to use certain sounds to form words and thus, at the age of twelve months, said "mama" and named some objects. As his speech developed, he suppressed a large percentage of the sounds he had previously used and finally, at the age of two, put words together to form sentences. All his growth processes passed through analogous stages, which varied in accordance with his efforts and his innate capacities and were affected by the amount of security that he received and the opportunities that he was offered.

This two-year-old, further, has developed much self-confidence and many habits of responsibility. He has, for instance, taken full responsibility for food habits, feeding himself, enjoying food, and always eating enough for health if he is offered a proper diet. His bowel habits and diurnal bladder control have been well established; he seldom has an accident, except under stress of some unusual or disturbing circumstance. Although he desires frequent expressions of approval, he plays by himself for short periods. He has found that it is fun to make noise. His emotional expression is spontaneous and without control. He is self-centered, being absorbed in his own capabilities and sense of usefulness.

A Psychology of Growth

At the age of two, the inborn temperament and individuality of each child is plain and unmistakable. It is very evident that one is alert, active, quick, and determined and offers more resistance than another, who is quiet, slow, and amenable to suggestion. One cries bitterly when disappointed; another is less sensitive. In other words, we see in action the same differences that we observed in the group of newborn babies on the examining table. These patterns are now more mature and unchangeable; they constitute the differences that create individuality.

It is extremely important for parents and nurses to see that a two-year-old has fun doing things in order that he may acquire the confidence that is essential for further growth and self-reliance. Discipline and restriction also present pressing problems, since the two-year-old can walk and is impelled by unbounded curiosity. Everyone has his own ideas on the subject of discipline, and they are probably a reflection of his own childhood. The question is not so simple as it may appear to be, however, and is worthy of careful consideration.

DISCIPLINE

As in the case of all forms of growth, the best discipline comes from within and that kind is more helpful in later life than any compulsion imposed by another individual. On the contrary, exaggerated demands for obedience and impossibly high standards of behavior may markedly impair a child's mental health. The problem of discipline usually begins to trouble parents about the time when their baby learns to walk and his curiosity and activity lead him to investigate everything in the house, including his parents'

The Two-Year-Old

treasures and such lethal weapons as matches, knives, and electric fans. The amount of restriction that can properly be placed upon a child depends not only on the nature of the coercion but also on given qualities, such as the degree of his vitality, the relative softness or hardness of his nature. Here again we must recognize the innate aggressiveness and degree of resistance that the child offers, especially to relatively unimportant situations. The final test of discipline is whether it furthers or disturbs mental growth.

Disciplinary problems caused parents of a twenty-six-month-old girl to take her to her doctor for examination and consultation. The child, who had been cared for according to the program previously described, was normal, healthy, and responsive; but now she posed a new question. The parents wanted to know how they could discipline her without cowing her. Watching as she ran around his office, the doctor saw that she was very active and full of healthy curiosity. While she investigated everything in sight, including objects that she could not have, she talked to herself about her discoveries and was obviously happy. Her long sentences indicated high intelligence. The parents reported that she was always lively and gay to a degree that had delighted them until recently, when she had broken two cigarette boxes, overturned a lamp, and pulled a cloth off the dining table, thereby shattering some of her mother's choice glassware.

Certainly she was not an easy creature to live with, but the qualities that motivated her actions were more important than the results. Her parents wisely recognized that, though they did not like to have their property destroyed, that was not so irreplaceable as the child's mental attri-

A Psychology of Growth

butes, which they might injure permanently by too stringent efforts to safeguard the lamps and the tableware. Whatever its immediate consequence, her conduct showed that she was endowed with intelligence, alertness, curiosity, aggressiveness, and a happy disposition. They recognized that her aggressive destructiveness was accidental and not motivated by resentment or anger. In other words, it was not an aggressive destructiveness that should cause concern; rather, the child's accidents were those that go with aggressive constructiveness or trial-and-error learning. She was making some mistakes, but these were not too serious and she was learning from them. If she could retain her present qualities she would grow into the kind of woman that her parents wanted her to be. Recognition of this fact was more essential than devising methods of forcing too much obedience on the little girl, and the problem resolved itself into a matter of preserving her good traits and a state of mental health while preventing her from doing the very few things that might have serious consequence.

There are various means of inducing individuals to act in a given way: (1) force or fear, (2) praise, (3) example, (4) interest, (5) habits of self-reliance.

1. Most children can be forced to do all manner of things, though some of them rebel violently from birth. These individuals develop serious behavior problems when parents set impossible standards. Anyone who uses force in governing a child should know that force is fear and that, whether it is exerted in the form of corporal punishment or of nagging, the results are the same. Since all behavior proceeds from habit, the child who is frightened too many times will habitually respond fearfully to every situation in life. Fear

and resentment also go hand in hand. In consequence, too frequent or too great use of force can only produce a fearful, resentful type of adult. Resentments, as we shall later see, lead to a sense of guilt as the child reaches maturity. Altogether, force, resentments, and a sense of guilt are the materials from which "nervous breakdowns" are made.

2. Praise, on the other hand, is a safe and effective instrument—safe because it does not stimulate any harmful responses, effective because it satisfies a fundamental human craving. Every individual needs attention, and the younger he is the more he requires. Children constantly seek attention and cannot help doing so. Such behavior is as natural as sleeping or playing. However, there are two kinds of attention—favorable, which is praise, and unfavorable, which is criticism. A child who is not receiving sufficient favorable attention to indicate general approval and whose emotional needs are not being satisfied will resort to any action that will attract notice to himself, even though he knows it will provoke censure. That being the case, the wise parent will give his child attention in the form of praise, realizing that this will make it unnecessary for him to court unfavorable notice. This practice produces gratifying results, because the child will do more for the sake of approval than for anything else in the world. There are different kinds of restriction. If parents are angry and use a threatening tone or slap a child, he becomes frightened and feels that his mother and father do not love him. If they use a gentle tone and have a kind demeanor, they can convince the youngster that he is a fine boy and that they are objecting only to certain things that they cannot allow him to do. Very often parents can substitute a permissible activity

A Psychology of Growth

that the child enjoys for the one that they must prohibit. By praising him for the thing he is now doing well they can partly offset the child's anger as the result of being thwarted. It is strange that so many parents feel it is not wise to be kind to their children.

3. A child learns by imitation, and his parents are the models that he follows most closely. If parents decide how they want their boys and girls to act when they are grown, behave in that manner themselves, and do not talk about it, they will have a good preview of their offspring as adults.

4. Children, like adults, do what interests them. If we knew how to add interest to the things we want them to do, discipline would be a simple matter. The difficulty is that we know very little about making things interesting to the small child. Parents (and nurses and schoolteachers) have difficulty in placing themselves on the child's level of growth.

5. In considering discipline we should never forget, furthermore, that we must regard all behavior in terms of habit and that habits of responsibility based on self-reliance are those which will be particularly valuable to the child when he is grown. In childhood he gets satisfaction from doing the things of which he is capable and for which he is loved. A feeling of usefulness gives him confidence in himself and makes it possible for him to take on responsibilities. He will develop self-reliance, therefore, when he has adult approval and is permitted to do things up to the limit of his capacity. A two-year-old is pleased when he is allowed to assume full responsibility for food and toilet habits, for help in dressing himself, and for play; and he gladly accepts the new obligations. The resultant self-discipline is more valuable than any force that could possibly be applied from the outside.

So much for general suggestions to the parents who wanted advice about their little daughter. Specifically there were a number of plans for them to follow. They might move breakable and dangerous objects out of her reach; they might move her out of the way of danger; and finally, they might, within certain limits, restrict her forcibly. Putting fragile and expensive ornaments on a high shelf for a time would eliminate breakage and solve one problem of discipline. The father suggested that a lock, which he could attach to the flour bin in ten minutes, might save untold trouble. The use of a playroom or a playpen would safeguard both youngster and house at times when the parents were unable to watch her, as long as she persisted in doing things that were genuinely destructive or hazardous. This would probably cause the young lady some displeasure but would do her no harm if the restrictions were not carried to excess. At other times, when the child did something that the parents could not tolerate, they might stop her forcibly if they were unable to distract her. A reasonable amount of restriction does a child no harm if, in imposing it, the parent does not lose his temper.

These suggestions conform very closely to the attitude that the Chinese have held for centuries. They keep their tempers when children become too troublesome, and punish them only by removing them from the presence of the adult members of the family. If a child's behavior is very objectionable, his elders sagely say, "His wisdom has not opened yet."

One question in the minds of most American parents is whether or not they should insist on prompt obedience. The answer is that they may have a right to expect some degree of it, provided that they are reasonable in their

A Psychology of Growth

demands on their children. Since parents are often unreasonable, however, and children seldom can carry out more than 10 per cent of the orders they receive, it is not safe to recommend exact and immediate compliance. Parents usually do not make demands in terms of the growth needs of their children, but in relationship to their own personality make-up and difficulties. They may take out on their children the resentments they developed in their own childhood and inflict their own anxieties on the youngsters, or they may be too tired and overworked to be reasonable with them. The attitudes of parents will be discussed in more detail later. Parents should not worry about disobedience in any but very serious matters. The important thing is to preserve the qualities that go to make up mental health, rather than to inflict fears and resentments in an effort to correct lapses, which are seldom of any consequence.

We cannot leave the question of obedience obtained by force and fear without mention of the two classical examples of its use on a national scale. In totalitarian Germany and Japan, unquestioning obedience to authority was imposed on every citizen. Under such a system, the leader was the only individual with freedom of action and therefore the only one without resentment, conscious or unconscious. In the groups below him each individual exercised his authority and vented his resentment on the persons who, in turn, were under him. Finally, the head of the family became a strict disciplinarian in relation to his wife and children and took out on them his resentment toward all those who were above him in authority.

Leaders of such countries know that the pent-up resentments of the mass will eventually be directed against them

in the form of revolution, unless that emotion can be turned upon others, preferably "our enemies," real or imaginary. Thus persecution of minority groups and, finally, wars are essential to the continuation of the totalitarian form of government. The release of this intense resentment accounts for the extreme cruelty of the Germans and the Japanese in the Second World War. In Japan, where authority is a part of religion, these resentments generate a terrible sense of guilt, since they are, in the last analysis, directed against the emperor, whom the people have been taught to venerate as the head of the state and as a true god. This sense of guilt accounts for the frequency of suicide in the Japanese military forces.

Parents often ask when or how they should "break" a child of thumb sucking, enureses, soiling, drinking from the bottle, or some other behavior that they do not like and which they believe has continued longer than necessary. By "breaking" they imply force. The answer is that a child should *never* be broken to or from anything. When these habits continue longer than they should, the probable reason is either that the child has not been able to grow sufficiently to take on the responsibility in question or that the parents are expecting their normal youngster to grow up too rapidly. If undesirable behavior continues beyond the period when it might reasonably be expected to change, one should try to determine why growing up has been too difficult for the child. When emotional needs are met and expectations are not too great, children take on responsibilities at the proper time. They do things when they are ready, that is, when they have reached the right level of growth. Incidentally, it is interesting to note that graduate

A Psychology of Growth

nurses very often wish their children to take on responsibilities far beyond their age. This apparently reflects the type of training that student nurses receive in hospitals, where precision of procedure and good results are essential.

It is not too much to expect that a child of two and a half, whose parents have adopted the proper procedure, should have taken full responsibility for toilet during the day, sleep and food habits, dressing, and playing alone for short periods of time; he should have learned that there are a few things he cannot do, and he should have accepted his responsibilities and his limitations without undue fears or resentments. In consequence, his mental health is almost assured.

The parents who try to reason with a very young child are inevitably doomed to disappointment in their method and, what is more painful, in their child. It would seem to be highly desirable to appeal to the child's intelligence in an effort to make him understand what he should or should not do; but the child cannot reason. A three-year-old thinks in terms of simple associations; his observations are elementary and concrete, and he is quite incapable of understanding the processes of the adult mind.

A final rule about discipline: "when you don't know what to do—do nothing; then you will be right about 99 per cent of the time."

Adjusting to Environment

All children are normally jealous; they resent the new baby. Play is important from an educational standpoint. In play children are normally aggressive, at times destructive, and they always fight. They can nearly always settle their differences by themselves. Progressive nursery schools provide safe group play. Self-reliance and habits of cooperation are developed by free play.

BROTHERS AND SISTERS

THE advent of a new brother or sister is not, as adults hope, a source of joy to the other child, but more often an affliction and the cause of new behavior difficulties. The groundwork of trouble is laid even before the arrival of the baby, particularly if no one has told Johnny what to expect. For some time, perhaps, mother has had to rest when Johnny wanted her to play; there have been confusion and whisperings and unexplained changes in the household, which made him feel insecure. This insecurity approaches panic when mother suddenly goes away. The nurse or aunt or friend who takes her place tells Johnny that he has a baby brother, but Johnny doesn't care about a baby brother; he wants his mother and she is gone. Unprepared for these unsettling events, apprehensive because of mother's absence, Johnny not unnaturally becomes very troublesome to the adult in charge of the household.

A Psychology of Growth

Mother's return with a baby does little to improve the situation for Johnny. The baby is the new sun around which the household revolves and Johnny feels himself a very minor and neglected satellite. Johnny sees mother nursing and bathing and dressing the interloper and holding him in her arms, where Johnny would like to be cuddled. She has less time for him than ever. In return for all that he has lost, Johnny has nothing but a brother, with whom he cannot play and on whose account he must be quiet and clean and obedient. Everybody asks him if he doesn't love the baby. Of course he doesn't. He resents his mother's attitude and hates the baby.

This is not theory, but a conclusion based on evidence acquired through play therapy and talking to young children. Hatred is their normal reaction to a new baby. For a detailed description of play therapy that demonstrates normal jealousy, read "Studies in Sibling Rivalry," by David M. Levy, M.D.¹ Adults should face the fact without surprise or disapproval. They cannot persuade Johnny to love his brother, either because that is desirable or because it is naughty not to do so; and such an attempt will lead only to a serious, lasting sense of guilt. It is far healthier to allow Johnny to express his resentment and to let him know that his feelings are not unnatural or wicked. If we recognize that jealousies are entirely normal and sympathize with Johnny, instead of blaming him, we can help him slowly to accept the readjustments in the family relationship and gain some security as the result of having a brother. With proper management we can restore his self-confidence and security by letting him feel the importance of being the older child and playing a more responsible role

in the family group. Slowly he learns to love his brother, as well as hate him. This is a good time for him to learn that he can love and hate the same person at the same time and that he cannot help feeling the way he does.

PLAY

Somebody once described a genius as an individual who learned as an adult what he knew instinctively when he was a child. This idea deserves serious consideration. We might translate it into terms of child care by saying that the successful adult is one who has been allowed to grow naturally, retaining and developing the traits that were his at birth. Play is an important element in this process, because it is (1) a source of the infant's earliest groping motions, which later develop into motor coordination and mechanical skill; (2) a release for emotional energies and a fruitful field for the growing imagination. The greatest emotional satisfactions in life, which result largely from the fullest possible use of mind and body, are, therefore, rooted in play activities. This applies also to creative work, which stems from imagination, originality, and the trial-and-error methods that play develops. Thus play, if not the mother of invention, is at least a very close relative.

Incidentally, play is not limited to children. It is a fundamental need that manifests itself throughout life. All work and no play makes John an incomplete man, as surely as it makes Jack a dull boy. Play is a valuable outlet for pent-up resentments or aggressive destructive behavior, which might otherwise be directed into undesirable conduct. No child and no adult can be good all the time; he would burst.²

A Psychology of Growth

In the unrestricted play of children we see a dramatization of their feelings and mental processes.

At the age of one or two, they are equally likely to caress dolls and play with them gently or try to pull out their eyes and hair. Sometimes when babies are placed together, they slap, claw, and bite one another. This behavior may be interpreted as normal curiosity or as evidence of an aggressive, destructive pattern already developed in the infant by insecurity and frustration of growth and emanating from the instinct of self-preservation, attack being the best defense. At any rate, babies of this age require some supervision.

During the next few years, their propensity for knocking down block towers, bursting balloons, and breaking toys gives evidence of the satisfaction that children derive from destructiveness. Children like to play together and, although they often show affection for one another, a few minutes later one may take pleasure in hitting the other over the head with any available weapon. They nearly always may be allowed to settle their differences by themselves. Because of these rapid changes, young children need intelligent and consistent management. Wrong methods of handling them can do much harm. In managing children, (1) it is necessary to recognize that they are like this and that there is a reason for their behavior; (2) adults must understand that these expressions of resentment are neither good nor bad, but that they are simply natural and must be accepted.

NURSERY SCHOOLS

The child's fourth year is the period of very nearly perpetual motion. The three-year-old is still unable to con-

concentrate on any one thing for more than a few minutes, unless it is connected with other children or with some physical activity. He is constantly in need of energy outlets. This, therefore, is the time when his requirements for mental growth can be provided by group play, such as a good nursery school affords.

Not all nursery schools fall into this category, however. While many of them are very helpful to mental growth, there are others that are distinctly harmful. The school is helpful insofar as it provides a safe place in which children can engage in group play. It does harm when it attempts to impose impossible standards of behavior or makes a fetish of "good" habits. The former type of school brings together a group of small children, provides them with crude toys, and, for the most part, leaves them alone to play as they like, work out their own standards of conduct, and settle their own differences. The other type of school goes to great pains to get children into the habit of hanging up their coats, putting their rubbers in a row, washing their hands, marching to the toilet, washing their hands again, eating everything that is put in front of them, taking naps without wiggling, behaving decorously, and exhibiting social graces entirely foreign to the minds of young children. Such training is not only useless, but it actually blocks mental growth and makes normal development impossible.

Because nurses are often called upon to help organize play groups, it is important for them to recognize these fundamental differences. In so doing, they can use as a guide the practices previously recommended for the home. The child may safely be allowed to act on his own initiative and without unnecessary regulation. The school should provide facilities and permit the child to use them as he sees

A Psychology of Growth

fit. If he has play materials, he will readily invent uses for them. Given the companionship of children of his own age, he will soon learn how to get along with them. By the time he is old enough for nursery school, he should be entirely responsible for going to the toilet—he has sense enough to know when he wants to urinate. Food should be placed in front of him and he should be permitted to eat or go without. Altogether, the nursery school should continue the program of making the child feel secure and permitting him to act independently, up to the limit of his capacity. The four-year-old child is able to take full responsibility for food, sleep, dressing, and toilet habits; and he can play with other children for longer periods with very little adult supervision.

The interests of boys and girls begin to diverge when they are five or six years old. All through these early years, we find constantly growing differences in the degree of mechanical skill and motor coordination reached by individual children; but just as these skills and coordinations develop in unvarying succession, so the children's interests also develop in sequence. In other words, all children do the same things in the same order, differing only in regard to the age at which they begin to do them. First, they play with small objects, piling them on top of each other; later they play with shovels; then they want to use a hammer, ride a tricycle, skate, dig tunnels, and build huts. They form clubs and secret societies, then fraternities, and finally women's clubs and rotary clubs.

In their play, children form habits of responsibility and self-reliance and gain valuable experience in social relations. When they are allowed to play freely, they learn the im-

portant lesson of give and take. Without any adult explanation or lecturing, they discover that it is important for them to share their tools and that is pleasant to divide the work on their various projects. They try different ways of doing things and invent new ways, learn to help and to accept help. Of course they fight, but they also learn how to settle their differences. Each one wants to hold the center of the stage and finds that he can have it only a part of the time. They have their accidents and often hurt themselves; but these experiences develop caution, which is a habit of being careful when doing dangerous things—not bad compensation for a few bumps.

Throughout their play period, children should be encouraged to use imagination, to work out their own problems, and to learn by experience. Nurses and parents must be content to play the minor role of sympathetic bystander. They can do nothing more helpful than to express interest in whatever a child is doing, to praise him for every achievement, and to restrain their own impulses to show the youngster how to make his mud pies and his snowballs or even to make them for him. While they may advance suggestions if a child asks for a little help, they should always make him feel that he is the one who is doing the job on hand.

Just as children derive no benefit from the tasks that adults perform for them, so they find no particular satisfaction in playing with complicated mechanical toys that are run by pressing buttons. As a matter of fact, parents who spend large sums of money on such playthings are not gratifying their children and, by giving them predigested mechanics, are actually interfering with the development

A Psychology of Growth

of their natural resourcefulness, imagination, and creative ability.

The best provisions for play are crude materials, such as blocks of varying size and shape, lumber, hammer and nails, pails and shovels. The best place for play is a large room or lot where children can be left alone. Naturally, we must guard them from serious injury in the house and keep them inside a fenced yard, if that is necessary to prevent them from running into danger outside; but within those limits we should give them complete freedom to work out their own ways of doing things and their own social rules and regulations. This culture may seem primitive in the eyes of an adult, but it serves the children's purposes very well. It is, indeed, far superior to an adult-created and imposed culture, where standards of behavior are always too high for children.

In this program there is no room for the teaching of manners, truthfulness, honesty, orderliness, or consideration for others. Observers see that children naturally exhibit a certain amount of these graces, but as we shall find when we study intelligence growth, they are abstractions that children do not have the intelligence to understand or the emotional development to appreciate before they reach adolescence.

Free play is valuable not only because it offers the opportunity for development but also because it provides an essential release for the child's aggression and the resentments and anxieties that it produces. Resentment and anxiety are normal emotions. It is as unfair to condemn a child for having them as it would be to scold him for being hungry, as unhealthy to force him to repress them as it

would be to refuse him food. Since play relieves these emotions, it should not be regulated by adult standards of propriety. Games that adults often deplore, such as cops and robbers and others in which children pretend to kill one another, should be encouraged and not suppressed by the organized play program of well-meaning but misguided leaders. Children should learn by experience that sometimes they love people and sometimes they hate them; sometimes they are confident and sometimes they get frightened; but that no blame attaches to these emotions. If we are to teach them anything about their play activities, it should be that they cannot help feeling as they do, that it is right for them to express their feelings, and that adults understand and approve.

Note that we have emphasized the importance of free play. This is not the same as unsupervised play. Although children should be allowed to choose their games and work out the details, there are times when restriction becomes necessary. Skilled supervision offers protection and help to that one child who sometimes is selected as a sacrifice to the pent-up resentments of the others in the group. Parents or some supervisor, furthermore, should know what children are playing. For example, homosexual practices, which cause great distress in later life, can start with childhood play. The supervisor who finds children engaged in sex experiments should not become perturbed, because such a reaction can create disturbances in the minds of the youngsters. An adult's anger may cause the suppression and repression of the children's normal curiosity and implant in their minds many fears about sex.

Helping adults to arrive at this understanding and to

A Psychology of Growth

view children with approval is another great task for the nurse and the physician. They must reassure parents and convince them that normal play and the free, natural expression of emotion, even when they are distasteful to the adult, are vital to growth and mental health. The nurse and the physician must remind parents constantly that suppression of normal emotions, such as fear and jealousy and resentment, is one of the prime causes of mental ill-health in the adult.

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Intelligence

Intelligence, one aspect of the mind, is the capacity to think and to solve problems. Like other aspects of growth, intelligence develops according to definite sequence. Individuals with the same general intellectual capacity differ widely in individual intelligence characteristics. Intelligence tests, properly interpreted, are of great value. Spelling, reading, and writing difficulties are usually innate. Environment has a marked effect on intelligence growth, especially during infancy and young childhood.

THAT aspect of growth which we call intelligence, that is, the capacity to think and to solve problems, is not one unit characteristic but comprises many elements, which we must consider separately. As in the case of other forms of growth, there are wide variations in the intellectual development of different children and little uniformity within a given individual. Nevertheless, studies of intellectual growth indicate that, like physical and emotional development, it follows certain specific patterns. Just as each muscle and each of the various systems of the body develops in a known sequence, so manifestations of the intelligence appear in a regular order.

One cannot leave this simple description of intelligence without pointing out that it is inaccurate and oversimpli-

A Psychology of Growth

fied, useful only for descriptive and clinical purposes; in reality, there can be no consideration of any behavior except in terms of the individual as a whole. Because we are attempting to discuss one aspect of behavior, which cannot be studied except in relation to behavior as a whole, there is much difference of opinion as to what intelligence really is. One description is anatomical; that is, the influence on behavior of the cerebral cortex, and especially the frontal lobe. This is the part of the brain that has developed most in the evolutionary process—the part that accounts in a large measure for the superiority of the human over other animals. From a clinical standpoint, we can consider intelligence in terms of tests, in the same way that we apply measurements to physical growth.

In early infancy there is less obvious differentiation between mental and physical growth. At this age the tests for intellectual growth and indexes of it are largely physical signs. If the central nervous system develops normally, the general behavior of the infant proceeds according to a fixed schedule. The most detailed and accurate information about the mental-growth patterns of infants is the result of studies made by Dr. Arnold Gesell ¹ and his coworkers at the Yale Clinic. In order to obtain a complete picture of growth patterns and to determine the intelligence level of infants, Gesell has described developmental sequences under four different headings: (1) motor growth, (2) adaptive behavior, (3) language behavior, and (4) personal-social behavior.

1. In the category of motor growth he has checked gross body control and fine motor coordination; posture, head balance, sitting, standing, creeping, walking, prehensory

approach to an object, grasp and manipulation of the object.

2. The adaptive-behavior division relates to finer sensori-motor adjustments to objects and situations; coordination of eyes and hands in reaching and manipulations; ability to utilize motor equipment appropriately in the solution of practical problems; capacity to make new adjustments in solving simple problems (that is, resourcefulness).

3. Under language behavior are included all visible and audible forms of communication: facial expression, gestures, postural movements, vocalizations, words, phrases, and sentences. While the development of speech requires social situations, it also offers clues to the condition of the central nervous system.

4. Under the heading of personal-social behavior Dr. Gesell deals with the child's reactions to his environment. Although they are affected by outside influences, they still indicate intrinsic development. Bladder and bowel control, for example, are cultural requirements, but they depend upon neuro-motor maturity, as well as intelligence and emotional growth. The development of this central nervous system governs the child's ability to cooperate in all phases of life.

Many observations of large numbers of children have shown that these behavior patterns, which unfold in a definite sequence, are all indexes of intelligence growth. By means of such studies it has been possible to set up criteria for the average child; that is, we can say that at a given age he should have reached a certain level of growth. These criteria form the basis for intelligence tests. While accurate descriptions of intelligence growth in infants are

A Psychology of Growth

fairly recent, accurate mental tests for older children were developed almost forty years ago. *

In 1908, Simon and Binet—French physician and psychologist, respectively—perceived the sequential growth patterns in children and began, in an empirical manner, to find a set of tests that could be used as a measure of intelligence. After giving a large number of tests in homes and schools to children who were considered average and normal, these investigators accepted as a criterion for each age group those questions or problems which a majority of the children of that age were able to pass. For example, they asked all children, “How old are you?” A large percentage—say, 70 per cent—of the five-year-olds knew their ages, while 30 per cent of the four-year-olds, and 90 per cent of the six-year-olds answered correctly. Therefore, since few of the four-year-olds, the majority of the five-year-olds and nearly all of the six-year-olds answered correctly, the investigators considered this question a test for children five years of age. In the same manner, six tests were devised for each year from three to eighteen. These tests that Simon and Binet worked out have been revised and improved several times, the latest revision having been made by Lewis Terman and Maud Merrill.²

Intelligence tests are given with the same accuracy that applies to blood chemistry. For example, the examiner secures the complete cooperation of the child, makes certain that he is comfortable in every way and that he is not frightened. He gives the tests and records the responses (graded as right and wrong) according to exacting, detailed instructions. When he uses the Stanford scale, the examiner gives the set of tests for the lowest year in which the

child passes all tests and continues to the year where all tests are failed. The following case illustrates the method.

John's age is five years and four months. We find that he passes the following tests (right answers marked + and wrong answers -).

YEAR 5

- + 1. Picture completion (completes drawing of man)
- + 2. Paper folding (folds 6-by-6-inch paper in triangle)
- + 3. Definitions
 - + What is a ball?
 - + What is a bat?
 - + What is a stove?
- + 4. Copying a square
- + 5. Memory for sentences
- + 6. Counting of objects

Since John passed all tests for Year 5, this is the basal year.

YEAR 6

- + 1. Vocabulary
- 2. Copying a bead chain from memory
- + 3. Mutilated pictures (recognition of what is gone from picture)
- + 4. Number concepts (picks up three, nine, five, seven blocks from twelve. Score + if right three times)
- 5. Pictorial likenesses and differences (picks out like figures from two cards)
- 6. Maze tracing

YEAR 7

- 1. Picture absurdities (what is foolish in pictures?)
- 2. Similarities (wood and coal—apple and peach—ship and automobile—iron and silver)

A Psychology of Growth

- + 3. Copying a diamond
- + 4. Comprehension (what is the thing to do in various situations?)
- 5. Opposite analogies (brother is a boy—sister is a —)
- 6. Repeating five digits

YEAR 8

All answers were wrong.

To obtain this boy's mental age we take his basal age, five years, and give him two months' additional credit for each test that he has completed correctly (since there are six tests for each year, he receives two months' credit for each test). Therefore, he receives six months in Year 6 and four months in Year 7, making his mental age five years plus six months plus four months, or five years and ten months of age.

The intelligence quotient (usually referred to as I.Q.) offers further valuable information. It is obtained by dividing the patient's mental age by his chronological age (real age). In this case the mental age is five years ten months, or seventy months, and the chronological age is five years four months, or sixty-four months. Seventy divided by sixty-four is 1.09. The patient's I.Q., therefore, is 1.09, usually expressed as 109. That means that this boy is 0.09 more capable in general than the average child.

Here, then, is a boy of high average intelligence. His mental growth will probably continue at the rate he has already established; and since the intelligence quotient is fairly constant in all persons, we can expect his I.Q. to remain about 109 throughout his life. This is not an

invariable rule, however. It sometimes happens that, when a child is given a second psychometric examination (intelligence test) at a later date, he is found to have an I.Q. as much as twenty-five points higher than the original one. Probably this means that environmental difficulties and emotional disturbances that were not recognized at the time of the first examination interfered with the tests and caused the original rating to be incorrect.

Children are classified according to their I.Q. on the basis of the following classification:

0-30	Idiot
30-50	Imbecile
50-70	Feeble-minded—moron
70-80	Borderline feeble-minded
80-90	Dull and backward
90-110	Adequate—average
110-120	Superior
120-140	Very superior
140-	Genius

What does this signify in terms of formal education? For example, how high must a child's I.Q. be to enable him to finish high school and college? Authorities generally agree that a boy or a girl needs an I.Q. of about 104 to graduate from a first-class high school and one of 110 to profit by college training.

Intelligence quotients for some eminent persons have been estimated as follows:

John Stuart Mill	200
Francis Galton	200
Goethe	185
Macaulay	180
Voltaire	170
J. Q. Adams	165
Pope	160

A Psychology of Growth

Tennyson.....	155
Samuel Johnson.....	155
Wordsworth.....	150
Byron.....	150
Lincoln.....	125
George Washington.....	125
U. S. Grant.....	110
Copernicus.....	105
Faraday.....	105

This table indicates that persons with fairly low I.Q.'s have achieved great success. Clinical experience bears out this observation. Two capable psychologists who examined a boy when he was eight years old found that his I.Q. was 97. He subsequently finished high school with a fairly good record and when he graduated from an engineering college he was near the top of his class. Another boy of twelve, who was doing mediocre schoolwork, was found to have an I.Q. of 104. Later he finished college and became very successful in business. These cases are cited to warn against placing too much reliance on the I.Q. It might be compared to a white blood count in the diagnosis of appendicitis. Although every physician wishes to know the count, he would never allow the result to influence his diagnosis greatly.

Experience in testing during the past twenty-five years has caused experts to change their conclusions about the average limit of intelligence growth. Originally they placed average adult mental age at sixteen years, but present studies now indicate that fourteen years is more accurate. In other words, maximum intelligence growth in the average individual is about fourteen years (which is analogous to stating that the average adult is five feet, seven inches tall). Beyond this point intelligence capacity is increased by

experience. For further information on tests for children, see "The Measurement of Intelligence," by Lewis M. Terman,⁴ and "Directions for Administering Forms L and M," by Lewis M. Terman and Maud A. Merrill.⁵

Long after the formulation of reliable intelligence tests for older children, we were still unable to learn the mental age of infants until, a few years ago, Gesell and his associates worked out their norms of development. Every nurse will be interested in these valuable tests and, since they should be read as a whole, the reader is referred to "Developmental Diagnosis," by Arnold Gesell and Catherine Armatruda.¹ Note especially pages 27 to 86.

These developmental schedules are of value in determining the developmental age of the infant and in demonstrating the sequence of growth. For example, at four weeks the baby clenches a cube in his hand; at sixteen weeks he looks from the cube to his hand, arm active; at twenty-eight weeks he transfers the cube from one hand to the other; two cubes are matched at forty weeks; at twelve months he applies cube on cube without releasing them; at eighteen months he builds a tower of three, and at two years builds a tower of seven. At three years of age he builds a tower of ten cubes and imitates a bridge. These progressive achievements give one measure of his increasing intellectual capacity, improved motor coordination, and emotional growth, as manifested in the pleasure he derives from doing things.

In an analogous manner many other tests for infants have been devised and from them it is possible to compare a given child with the progress of the average child of the same age.

The chart below, prepared by Gesell, is useful for summarizing behavior.

A Psychology of Growth

PRELIMINARY BEHAVIOR INVENTORY

Name John Doe

Age 2.0 mos.

Date 7/30/

Case No. 00

Age Zone	MOTOR	ADAPTIVE	LANGUAGE	PERSONAL-SOCIAL
4 wks.	Locks head control	Brief eye following	Impassive face	Stares at surroundings
Zone	Asymmetric in supine	Drops toy immediately	Small throaty sounds	'Listens' to sound
10 wks.	Head erect, slight bobbing	Incipient approach, rattle	Coo	Spontaneous social smile
Zone	Symmetric supine postures	Regards rattle in hand	Laughs aloud	Hand play
18 wks.	Sits, leaning forward	Reaches & grasps toy	Squeals	Feet to mouth
Zone		Transfers toy	M m sound (crying)	
40 wks.	Sits well, creeps	Combines 2 toys	Dada-Mama	Nursery tricks
Zone	✓ Pulls to feet at rail	Picks pellet, thumb & index	✓ One other word	✓ Feeds self cracker
52 wks.	✓ Walks, one hand held	✓ Cube into cup	— Two other words	✓ Co-operates in dressing
Zone		✓ Tries tower 2 cubes	✓ Responds "Give it to me"	
15 mos.	— Walks alone, toddles	— Tower, two cubes	4-6 words	2 Points & vocalizes wants
Zone		Six cubes into cup		Casts toys
18 mos.	Walks well alone	Tower 3-4 cubes	10 words	Toilet regulated day
Zone	Sits self small chair	Imitates a stroke	Jargon	Carnes huss doll
2 yrs.	Runs	Tower 6-7 cubes	Joins 2-3 words	Asks for toilet day
Zone	Up down stairs alone	Imitates circular scribble	Names 3-5 pictures	Puts doll to bed, etc.
3 yrs.	Rides tricycle	Imitates 'house' of cubes	Sentences	Feeds self well
Zone	Stands 1 foot, momentarily	Imitates cross	Gives full name, sex	Puts on socks, undies

INSTRUCTIONS: (1) Check the most advanced behaviors in each field of behavior. (2) The checks will indicate an approximate maturity age zone.
 (3) NO DIAGNOSIS CAN BE MADE ON THE BASIS OF THIS INVENTORY. Gross deviation from actual age, or marked disparity between behavior fields indicates the need for a diagnostic behavior examination.

CHARACTERIZATION. (physical factors, social factors, posture, attention, rapport, emotion, speech, etc.)

Undersized for age. Golly and friendly. Performs slowly. Complaint: "Backward in speech." Has 2 older, normal brothers. Good home conditions. No behavior difficulties, except failure to respond to toilet training. Needs diagnostic examination.

Since tests designed to measure general intelligence do not reveal individual mental characteristics, it is necessary to find others that provide more detailed information about the child. Individuals who have the same I.Q. have not necessarily reached a uniform state of development in all particulars; indeed, they show a wide divergence both of growth and of innate capacity in different fields. In addition to mental age, therefore, we speak of the height age, weight age, dental age, reading age, spelling age, arithmetic age, performance age (relating to motor coordination, mechanical skill, etc.), and others. Research workers are now making a great effort to devise a means of obtaining a fairly complete cross section of an individual's developmental level, showing both his general capacity and his particular abilities or difficulties. In order to do this, it

may be necessary to give at least twenty-five different tests.

As a result of tests and observations, it is clear that a child's chronological age is hardly a gauge of his mental ability. It is manifestly unfair to assume that he should be able to cope with given problems merely because he is six or seven years of age. As far as intelligence is concerned, the eight-year-old may be five years old or ten years old. He may at once have the mathematical ability of an eleven-year-old, yet be able to read and spell no better than a six-year-old. He may be a musical genius or devoid of musical ability. He may have considerable manual dexterity or none at all. Until we are able to determine his aptitudes and deficiencies, we cannot have an adequate conception of his educational needs; and it is necessary to fulfill these needs if his mental growth is to continue unimpeded and if he is to get satisfaction out of the things that he does.

Some children have superior intelligence as applied to all subjects with which they have to deal; some, of average intelligence, may have highly developed special abilities; others, with average or high intelligence, have certain intellectual handicaps of a more or less serious nature. Mathematics is closely correlated with general intelligence and many children who have a high I.Q. are in the genius group so far as mathematical ability is concerned. Master chess players and outstanding mathematicians, such as Isaac Newton, belong in this group. That does not mean, however, that all children who are poor in arithmetic are necessarily below the average in general intelligence. Not infrequently, they are rated superior. Conversely, it sometimes happens that a child of average intelligence has read-

ing and spelling ability far beyond expectations on the basis of his I.Q. Musical ability seems to be a special talent—one that bears little relationship to intelligence.

Many children have serious special handicaps, which are entirely disproportionate to their general ability. This is particularly true of individuals who have specific reading, writing, and spelling difficulties. These selective disabilities were recognized long ago, and poor reading, especially when associated with writing and spelling difficulties, was ascribed to mental deficiency. In 1896, Dr. James Kerr, an English ophthalmologist, published a series of such cases. The condition has been described as a “specific disease entity” called congenital word blindness. Because of its similarity to acquired word blindness, caused by injury or vascular accident, scientists have suggested that it may be due to a congenital defect in the development of the brain areas for registering visual word memories.

Dr. Samuel T. Orton⁶ made the most important contribution to the recognition of this disability in a relatively large number of children and to the realization of its serious consequences. He pointed out that many school children who were considered mentally deficient, because they were unable to learn to read, were not subnormal but were suffering from this word blindness. The condition, according to Dr. Orton, occurs more often in boys than in girls. Features that he found to be fairly common to this group of children were (1) difficulty in differentiating *P* and *Q*, *B* and *D*; (2) a tendency to confuse palindromic words, such as *was* and *saw*, *not* and *ton*, and to reverse paired letters and whole syllables; (3) very frequent confusion of diphthongs, such as *ea* and *ae*; (4) facility for mirror writing and draw-

ing, shown very early in life, and more than average ability to read from a mirror. Dr. Orton found no defect in auditory memory but a failure to relate the printed word to its concept. Some hitherto unrecognized factor prevents certain children from acquiring easy association between the visually presented word and its concept and limits their ability to express the concept in writing, thus causing poor penmanship and spelling.

In explanation of this difficulty, Orton offered the theory that it was due to a lack of cerebral dominance, that is, a confusion of handedness. Right-handed individuals have specially developed areas in the left side of the brain (Broca's area) that have to do with the names of objects and particularly with visual word memory. Left-handed persons have similar areas in the right side of the brain. Individuals who experience this type of reading difficulty almost always present a history of left-handedness in their immediate families; they themselves do some things with the right hand, some with the left hand; in other words, they suffer from a confusion of handedness. Most persons have an eye dominance; that is, they see primarily with one eye, while the other follows. Children with these reading difficulties commonly have the dominant eye on the side opposite that of their handedness.

Corresponding difficulties arise in spelling. At the pre-school age a child learns the names of objects and acquires the ability to speak them. When he goes to school, a large part of his training consists of associating these spoken words (or auditory memories) with the printed symbols that represent them; that is, the spoken word "man" with the combination of letters m-a-n. Soon after he has made this

A Psychology of Growth

association (the spoken word with the printed symbol for it), he must reproduce the symbols by spelling and writing the words. The child who has a tendency toward mirror writing and who fails to build an easy association between the various sensory "engrams" (visual, auditory, kinaesthetic) produces many reversals in reading and spelling. For example, he writes *B* for *D*, *F* for *T*, *G* and *P* for *Q*. He is unable to recall the order of certain letters and habitually transposes them in such combinations as *ea* and *ae*, *ei* and *ie*. He also confuses the position of syllables and may often reverse letters, writing *tac* for *cat* and *tar* for *rat*. The following examples illustrate characteristic spelling difficulties of this order.

At the age of six and a half, David had already begun to have serious difficulties in school. His parents told the physician whom they consulted that the boy was inattentive, uninterested in school, and that he liked only to play. His teacher reported that he showed off and annoyed his classmates. He was well physically and had an I.Q. of 125. Upon further interrogation, the parents reported that David's development had been normal except for delayed speech (not uncommon in these cases), a habit of doing some things with one hand and some with the other, and a tendency to draw backward and upside down. They reported also that his grandfather was a "terrible speller."

Work with David revealed that he could not read or write the simplest first-grade words, not even his own name. He boasted that he was a good fighter, which was not true since he had poor coordination. It was found that David's school employed the flash system of teaching reading; that is, the teacher showed the children printed words and they were

expected to remember the names. Since most children are visualists, this method is usually more efficient than the former system of teaching the alphabet and the sounds of the letters before asking children to learn whole words. David, however, had poor visual memory and, although he saw the same word many times, he could not remember its name. The physician explained this situation to the mother and advised her to employ a tutor and to have him teach the boy according to the auditory and kinesthetic method. David's father refused to take this advice, insisting that the child was only lazy and spoiled and in need of discipline.

Two and a half years later, the patient was examined again. He had remained in the first grade for two years and was now threatened with failing the second grade. His father thought he was stupid and announced that he would whip him if he failed again. The teacher had lost all patience with the child. He was showing off more than ever and had many fights with other children. At home, he teased his younger sister incessantly and was negativistic and disagreeable. He said that he hated school, where he was in the "dumb" class, and liked nothing but movies. The following words are samples of his spelling: *girl, gird; the, thae; bad, dab; boy, dog; school, shoow*. Analysis of this work showed that the boy was spelling by sound and guess. He was unable to read such words as "fence," "around," and "over." The word "the," he called "it"; "boy," "dog;" "on," "and."

Both parents finally agreed to let David have the special type of tutoring that had been recommended at the time of the first examination, and four months later he was doing satisfactory work in the third grade. His reading was then

A Psychology of Growth

average for the class; his spelling was poor, but improved. One could predict that he would be able to continue through school, even though he might be poor in spelling. The most marked improvement in David, however, lay in his mental attitude. His mother reported that he was a "different boy." This metamorphosis was caused by the boy's understanding of the nature of his difficulty; his feeling of success in school, for the first time; and the changed attitude of his parents.

In this connection, one should remember that, while the ability to spell correctly is helpful, lack of it is not a critical handicap in life. Spelling difficulties cause criticism in school and in training courses, but they should not be taken too seriously.

Tom, an eleven-year-old, had experienced difficulty in reading ever since he had started going to school. His teachers complained that he did not work and spent most of his time looking out the window. In the first five years of his school life he was diagnosed as retarded, having arrested emotional development, lack of focus of his eyes, and hypothyroidism. The two latter diagnoses were contrary to the findings of a competent ophthalmologist and the results of a basal metabolism test. After two years of failure in school, he was placed in the "opportunity room," known to everyone except the teachers as the "dumb room." (Incidentally, such rooms, which are designed for children who are mentally deficient or for any reason unable to follow the regular school program, usually offer more custodial care than opportunity.) During these school years, Tom became a major behavior problem. He was large for his age and grew into a bully. He beat other children severely, broke

windows, and made himself objectionable to everyone, including his parents.

Examination showed that Tom was normal physically. His I.Q. was 135 but he had a mixed handedness; his right hand and his left eye predominated. The parents reported that the boy's paternal grandfather was partly left-handed and was poor in spelling. The paternal grandmother wrote and spelled badly and did not like to read. Tom was very proficient in arithmetic. He liked shopwork and made many electrical devices by following pictures and diagrams. In reading, however, he did not know such words as "remember," "envelope," and "regrettable." He also made many word substitutions, such as *they* for *there*, *over* for *under*, *in* for *on*, *went* for *gone*. He spelled *carrot*, *caret*; *everyone*, *everone*; *bottom*, *bottoner*; *farther*, *forther*; *either*, *aether*; *tomorrow*, *tomoro*; *remember*, *rremenber*. Here, again, is evidence of poor visual word memory and spelling by sound and guess.

Although Tom became extremely cooperative and made every effort to develop his visual memory, his progress was very poor. However, with special tutoring that developed auditory and kinesthetic memory, he showed slow but continuous improvement. After two years of this help, he was able to read sufficiently to keep up in his schoolwork and to spell well enough to express himself to understanding teachers. In his case, as in the previous one, the change in his general attitude constituted his outstanding improvement. After a few months' time he became a studious, cooperative child.

It was Kenneth's schoolteacher who referred him to a physician for examination. At the age of eleven he was enrolled in his third school system. In the two previous

A Psychology of Growth

ones he had been considered retarded. He was well physically and had an I.Q. of 99, but he could not learn to spell. When asked to write, from dictation, "four score and seven years ago our fathers brought forth on this continent . . .," he produced the following: "for cree and care yers curtey or ferythr beril orre on theis certhe." This boy's ability to do schoolwork increased three years in six months' time after the principal began to give him special help thirty minutes a day.

It is extremely important to recognize these cases, not only because of the obvious difficulties to which they give rise, but also because they always culminate in emotional disturbances. In fact, they might be used to illustrate what happens when a child is thwarted. The child is convinced that he is stupid and is correct in assuming that he is not liked by his parents and schoolteachers. Since failure in school is a reflection on both parents and teachers, they are all eager to disclaim any responsibility for the condition, and the child is censured at home and in the classroom. When he is unable to do the schoolwork, he loses interest; because he feels stupid and bad, he shows off before the other children; because his classmates ridicule him and call him "dumb," he assumes the air of indifference or, more frequently, fights back and tries to get even with them. Though neurologists and psychologists have understood this condition for more than twenty years, most teachers do not recognize it.

Patients who suffer from these disabilities are often referred to the school nurse, because teachers and parents have been educated to suspect visual difficulties when children cannot learn and because eye-muscle unbalance is often associated with the condition. If the nurse bears in

mind the nature of word blindness, she will find that it is easily diagnosed from the family history and from the patient's writing and drawing.

In the treatment of one of these cases, the first important step is to acquaint the parents, the teachers, and especially the child with the nature of the difficulty. It is necessary for the physician to reassure the patient by telling him that he is not a stupid but an intelligent child, although he was born with a special handicap. He should be told that, owing to this handicap, he may always be a poor speller, but that with proper training he can learn to spell well enough to get through school. When the teachers understand the source of the pupil's difficulty and he is given adequate help, his conduct and his classwork improve and he becomes a happy, cooperative child.

There are other special defects, of which the most common are poor motor coordination and lack of a sense of rhythm. Children who have the former handicap may not be able to write well and those who lack a sense of rhythm cannot learn music.

Most schools are not equipped to give the special help needed by children with these various handicaps, especially in cases where the condition is severe. Such conditions, particularly those which relate to writing and spelling, have been treated by many methods. The methods that have been most successful were developed by Dr. Grace M. Fernald, who has described them in her book, "Remedial Techniques in Basic School Subjects."⁷

ADOPTION

A discussion of intelligence, especially in the case of infants, would be incomplete without added emphasis on

A Psychology of Growth

the effects of environment upon the rate of growth. This appears strikingly in orphanages, where there are so many babies that it is not possible to supply the growth needs of all. Not uncommonly, therefore, babies who appear backward while they are in these institutions and who fail to pass the intelligence tests for their ages experience rapid mental growth when placed in good homes and often show superior intelligence.

This phenomenon is illustrated by the case of Peter, who was taken from a good orphanage at the age of eleven months. After he had been given careful tests and had been observed for several hours, it appeared that he probably had normal intelligence. Since the foster parents wanted a child whom they could expect to grow up to take a place in a family of intelligence and education, a six-month test in the home seemed advisable. During little Peter's first few months in his new home, he changed from a rather apathetic, expressionless, inactive baby to one who was alert, active, animated, and happy. At the age of four, intelligence tests showed that he had an I.Q. of 120, a high degree of intelligence, of which he had given no evidence while he was in the orphanage. Any pediatrician who sees many adopted babies frequently observes this acceleration of mental growth when children are removed from institutions to private homes.

Observation of such cases, in addition to our knowledge of the importance of satisfying growth needs, leads to the conclusion that babies should not be kept in orphanages longer than is absolutely necessary. Orphanage executives agree that it would be desirable to use such institutions only as clearing stations and to make the turnover as rapid as

possible. Prospective parents of adopted children should take babies at a very early age, but only on a six-month or one-year trial basis. The reason for the latter rule is the possibility that parents who adopt a baby soon after its birth may later find that they have taken into their care a mentally retarded child.

This discovery may have painful consequences, as in the case of baby Grace. She was adopted at the age of two weeks, with the understanding that her background was good and that her real parents were highly intelligent. When she was six and a half, however, her first-grade teacher reported that Grace was making no progress in school. Intelligence tests showed that she had a mental age of five years, an I.Q. of 76. Further investigation of the little girl's antecedents revealed that the assurances given to the prospective parents before her adoption had been based on mere opinion, rather than on accurate knowledge. Although the foster mother and father were able to give the child every opportunity for education, there was nothing that anyone could do to raise her I.Q. The parents, particularly the mother, could not accept a retarded child, and the adoption was a great misfortune for all concerned.

When it is available, prospective parents are entitled to accurate information about a baby's intelligence and should know whether or not there is serious mental disease, such as epilepsy, in his background. On the other hand, the baby should be given only to parents who are able to supply his needs for normal growth and give him a chance to grow up in mental health. Determining the attitudes of prospective parents requires the services of skilled investigators.

A Psychology of Growth

Edith is an example of the bad results of an unhealthy parental attitude. At the age of eighteen, she was placed under the care of a physician because of her fear of vomiting, especially in public. "I am terrified of what people will think of me," she said. For several years she had experienced increasing fear of public opinion, of failure to pass examinations, failure to be accepted by a good college sorority, and many other anxieties. She had an I.Q. of 125.

Investigation of the girl's history revealed that she had been adopted at the age of two weeks. The parents were college graduates and both came from very good families. During the child's infancy, her schedule was extremely rigid. She was never held, was strictly disciplined, and became a very good, tense, apprehensive little girl. After several interviews, the mother admitted that she had never wanted the baby and had never "felt right" about her. It was the father who wanted the child. "He knew about her," the mother said, "and was crazy about her, and so, since I could never have a baby, I went along with him." The relationship between the mother's attitude and the child's mental health is readily apparent. Cases such as this indicate the need of careful studies of the infant and the prospective parents before adoption if we are to safeguard the child's mental health.

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Mental Deficiency

Mentally deficient individuals present problems to their parents, schools, society, and themselves. These individuals do not have the intellectual capacity to understand the rules and regulations of society. There are many causes for mental deficiency. For the mental health of the parents and family, an infant who is of very low mentality should be placed in an institution as soon as possible. Educable mentally deficient children can become happy, useful citizens if given adequate training.

INTELLIGENCE is a matter of growth. At one extreme of mental growth we find the idiots, in whom there is practically no development of the mind; at the other extreme we find the geniuses, whose mental growth has proceeded far beyond the average. Near the lower end of the scale we have mental deficiency, or amentia, a condition in which the mind has failed to reach complete or normal development.

The psychologist differs from the biologist and the sociologist in defining mental deficiency. In the psychological meaning of the term, a feeble-minded individual is one whose I.Q. is 70 or less. From the biologist's and the sociologist's point of view, Tredgold¹ defines amentia as "a state of incomplete mental development of such a kind

and degree that the individual is incapable of adapting himself to the normal development of his fellows in such a way as to maintain existence independently of supervision, control or external support." This statement, which is similar to the legal definition, implies that some individuals who have low I.Q.'s may, nevertheless, be capable of supporting themselves and getting along without supervision or control. From the biological and the sociological standpoints, therefore, they may not be classed as mentally deficient.

Psychologically, on the other hand, no individual can make a normal adjustment to society unless he is capable of understanding its important standards—honesty, truthfulness, justice, and the like. These are all abstractions. Intelligence tests show that abstract thinking does not begin to develop before the mental age of twelve years, and the individual whose intelligence quotient is 70 or below never reaches that age level. One test for a twelve-year-old is the series of questions: What is charity; envy; justice; revenge; courage? These are everyday terms and yet, until children reach the mental age of twelve years, they do not know the meaning of them. What is justice, for example? We all know the meaning of this word and yet we probably could not agree on a definition, because it is a general term—one that, in part, means the same thing to all of us and, in part, has a different meaning in each person's mind. To the mentally deficient individual, however, these terms have no meaning.

Another demonstration of intelligence growth and the inability of mentally deficient individuals to do abstract thinking can be made by showing a picture to children of

A Psychology of Growth

different ages. The two-year-old, when asked to point them out, can indicate the boat, the tree, and other elements in a certain picture. The three-year-old can voluntarily name these objects. The seven-year-old describes the picture in concrete terms, saying, "There is a boat in the water. There are men in the boat. There are trees on the shore." The normal twelve-year-old will probably say, however, "The boat must be going down the rapids, because the man and the woman look scared." This observation of an abstract concept indicates that the child has some insight into the situation depicted and can understand the possible consequences. The importance of the ability to do abstract thinking cannot be overemphasized. We do not expect it of normal children below the mental age of twelve or of mentally deficient individuals who never reach this level of growth.

Mental deficiency has been ascribed to many different causes: inheritance, encephalitis, anoxemia, poisons, brain hemorrhage, birth injury, vascular anomalies with resulting thrombosis of the vessels, and lack of development—usually called cerebral agenesis—which is probably the most frequent. When cerebral agenesis occurs in the child of mentally deficient parents it can be easily explained as a congenital or familial condition due to poor stock or poor germ plasm. It is not so easy to account for the condition in that large group of mentally deficient children whose parents have normal or superior intelligence; but scientists have suggested that it might be due to the bringing together of certain latent strains in the germ plasm, or to some toxic effects on the germ plasm at the time of conception, or to encephalitis before or soon after birth.

Mental deficiency resulting from an insufficient oxygen supply for the fetal brain during labor has been the subject of much discussion during the past few years. Some medical men feel that the sedation of mothers during labor may cause this condition. During infancy, encephalitis, especially of the virus type, may cause sufficient destruction of the cortical or subcortical areas of the brain to result in feeble-mindedness. Although the same condition in older children hardly ever causes damage, one should give a guarded prognosis when an infant of fifteen months or younger develops encephalitis.

Science is familiar with mental deficiency caused by rupture of the blood vessels and the brain tissue at birth. Since the blood vessels at the base of the brain or in the temporal region are the ones that are usually injured, causing motor paralysis, the amount of damage to the intelligence varies. For reasons that are not fully understood, however, the rupture of a cerebral blood vessel in an infant or a young child usually causes mental deficiency. In these cases there are always localized neurological signs; either the patient has paralysis or paresis, which is localized to one side of the body, or, if there is damage to both sides of the brain, one side of the body shows greater weakness than the other.

Not uncommonly, damage to the brain, resulting in mental deficiency, is caused by the rupture of a cerebral blood vessel between the sixth and thirty-sixth months of life. In these cases the child has a "stroke," or an apoplectic attack. The onset is acute and is marked by high fever and convulsions, which may last for several hours or days. Following this, a child who previously may have been

A Psychology of Growth

altogether well and normal, will suffer from weakness, and then from paresis on one side of the body and a degree of mental deficiency that varies with the individual. In some cases, a child may have a second hemorrhage on the same or the other side of the brain. This condition was first described as polioencephalitis of Strümpfel. It is, however, neither a polio nor an encephalitis, but a brain hemorrhage that is due to a congenital weakness of the walls of the blood vessels in the brain. The same damage, with a similar clinical picture, can be caused by thrombosis of the cerebral blood vessels.

Mental deficiency is not only a great handicap to the child, **but** also the source of a serious problem in the home. The **mentally** handicapped child requires special consideration there and also in the school and in society at large. As Wile ² has pointed out, "the inferior child struggling against incapacity and overdemand is no more a victim than the superior child whose mental gears are not enmeshed in educational dynamics. Among these groups are found an abundance of nonconformists in behavior, retardates, truants, delinquents, and neurotics."

From the point of view of the most normal parents, the discovery that they have a mentally deficient child is a serious blow. The factors contributing to their distress may vary in intensity with individual cases, but these usually include unconscious biological resentments against bearing an abnormal child, the resultant social stigma, fear for the future well-being of the youngster, and lack of pride in his present accomplishments or lack of hope for future achievements. In addition to these trials, many parents

are afflicted by others, which are even more distressing. One of these is the idea, which is deeply ingrained in many minds, that every misfortune in life is punishment for wrongdoing. Nurses and physicians should be aware of that possibility and should assure the parents who come to them with their problems that the child's deficiency is not due to anything that the mother or the father did or did not do, should or could have done. It can best be described as one of the misfortunes of life over which no one has any control.

A mother whose child was an idiot (because of cerebral agenesis) was typical of those parents who blame themselves for their children's deficiencies. She suffered great distress because she had felt, even before a medical examination revealed the full truth, that something was wrong with the baby. That is a normal reaction; mothers generally suspect the truth before physicians inform them that their children are developing slowly. In this case, the mother was abnormally disturbed and had become depressed and mentally ill because she believed that her child's condition was due to the fact that she had been a "very bad girl." In her childhood her mother had caught her masturbating and had convinced her that she was very wicked. When she married, she had a great deal of trouble in making a sexual adjustment. In discussing her problem with a physician, she said that the first time she saw the baby she knew that something was wrong with him but that "out of dread" she waited four months before getting a medical opinion. She was convinced, she said, that this defective child was given to her as punishment for her bad habit. After the doctor's assurances had removed her sense of

A Psychology of Growth

guilt, she was greatly improved and was able to face the tragedy of having a subnormal child. Later she gave birth to a normal baby.

Because of the popular stigma attached to the words "idiot," "imbecile," "feeble-minded," "moron," and "not bright," they should not be used in discussing subnormal children with their parents. The terms "mentally handicapped" and "slow growth" convey the same meaning and are less offensive to many people. Often after a physician has pointed out that a child is not doing the things that are normal for his age and has explained that he will never be able to do regular schoolwork, one of the parents will say "but he is bright." The reply then should be that he is a fine, bright child, but that he will never be able to handle academic subjects and will have to learn to work with his hands.

Mentally deficient children are not necessarily a loss to society or lifelong burdens to their families. Some of them are demonstrably educable, and authorities now recognize that they may find a niche in society and become useful citizens.

This has not always been the case. As late as 1912, Fernald called feeble-mindedness "the synonym of human inefficiency and one of the greatest sources of human wretchedness and degradation; the social and economic burdens of uncomplicated feeble-mindedness are only too well known. The feeble-minded are a parasitic, predatory class, never capable of self-support or of managing their own affairs. The great majority ultimately become public charges in some form. They cause unutterable sorrow at home and are a menace and a danger to the community."

This attitude echoed through much of the psychological, criminological, sociological, and educational literature of the early twentieth century. Experts held that a state institution was the logical guardian of feeble-minded individuals and advocated it as a means of relieving parents and society of their presence in the home and at large in the community. During the past quarter century, ideas concerning the management of these individuals have undergone a great change, until today authorities realize that the mentally handicapped can learn to do many kinds of work efficiently, and that the community not only can but should use them for constructive purposes.

Fernald himself was one of the authorities who ushered in the new era, after he found that state institutions were not having good results with the mentally handicapped. When he made a follow-up study of all the individuals discharged into the community from the Massachusetts School for the Feeble-minded from 1890 to 1914, he found that 35 per cent were complete failures, despite the fact that those who were allowed to go home were only the ones who appeared to be the most promising. Similar studies, made later by Matthews, Stroma, Folley, Brown and others, also showed that the training afforded by public institutions was not having encouraging results. Between 21 and 40 per cent of the feeble-minded discharged from state institutions were failures in society; that is, they became serious behavior problems or were completely dependent for support.

Quantitatively, too, institutional care was insufficient. The mere number of mentally subnormal children has made it impossible for any state to care for them all. In one city alone, an investigator found 21,000 mentally handi-

A Psychology of Growth

capped children. Strayer ³ arrived at that figure in 1932 as the result of a survey of the Chicago public schools. The state of Illinois, according to careful estimates, probably has more than 200,000 children with varying deviation from the normal. Such figures, which are typical rather than unusual, indicate the reason why no state has been able to provide institutional care for even 10 per cent of this group. Furthermore, it is the higher grade of subnormal children, those who have seldom been considered institutional cases, who need the most specialized attention. This help has always been considered a community problem.

One of the dangers that go hand in hand with mental retardation is the possibility of delinquency. This relationship has been demonstrated many times. A study made by Glueck of 1,000 male delinquents in the Boston Juvenile Court showed that 28.2 per cent were dull, 17.1 per cent were borderline cases, and 13.1 per cent were feeble-minded, making a total of 58.4 per cent who were mentally retarded. Thus Glueck found a much higher proportion of children of lower intelligence among delinquents than in the general population. In studies of male and female delinquents, Glueck found that 78.9 per cent were retarded two or more years below the school grades normal for their ages. Wile ² quotes statistics showing that in New York, in 1932, 29 per cent of the delinquents were mentally retarded; in Boston, in 1937, 37.8 per cent; in Chicago, in 1923, 58.6 per cent of the fourteen- to fifteen-year-old boys going through the boys' court were retarded two or more years.

No figures are available to show the percentage of mentally retarded individuals in the group that is dependent

upon society for support (the relief load in normal times).

The foregoing in no way proves that mental retardation, per se, is the direct cause of delinquency or dependency, but only that the subnormal individual, being particularly subject to these ills, requires more than the average safeguards. Instead of receiving needed help, however, the majority of these children are made to meet obstacles unknown to the normal child. They are rejected children and, from early childhood, suffer from their parents' chagrin and disappointment. At school they are unable to keep up with their contemporaries and miss the satisfaction of accomplishment that is enjoyed by normal children. After repeated school failures, they are untrained for any kind of employment. In this situation lie untold causes for personality difficulties, which might result in delinquency or dependency.

While these problems may sometimes result from mental retardation, they are more often symptoms of social maladjustment that have emotional rather than intellectual causes. A study by Shimberg and Reichenberg⁴ shows that mentally retarded individuals with good personality traits make a much better adjustment than those individuals who have poor personality traits. In this respect, the experience of the mentally handicapped parallels that of the normal individual; that is, adjustment in society depends more upon normal emotional growth and development than upon any other factors. Since the mentally handicapped encounter more serious obstacles than do normal children, their emotional problems are greater and there is more maladjustment among them. When we remove these obstacles, however, or offer kindly, intelligent help in surmounting

A Psychology of Growth

them, the handicapped child should be able to grow into a happy, useful individual.

A healthy individual may be described as one who is able to use his native resources in the most efficient manner and thereby enjoy the greatest accomplishments of which he is capable. This applies as much to the person who is retarded mentally as to the normal individual. Both can enjoy physical and mental health if their environment provides them with the opportunity for reaching a maximum growth and development. In the case of the mentally deficient child, the determinants for mental health are not dissimilar to those for the normal individual.

The first essential for mental health is security, and this begins in the home. Whatever the child's condition and however disappointed the parents may be, it is necessary for them to accept him as he is and to make him feel that he is loved and wanted. Lack of such security is one of the principal causes of mental ill-health for these handicapped children. To be sure, it is very difficult for parents to accept the mentally retarded child. Whether they feel that he will not be a credit to them or fear for his future welfare, they are likely to reject such a child and to react to him by overprotection at one time and at other times by overcorrection. Either they try to do everything for him and to shield him from the world, or they try to force him to behave like a normal child. Both courses are likely to lead to serious emotional disturbances. For the welfare of the child and of the family, therefore, it is necessary for parents to face the inescapable facts and to govern their actions accordingly.

Parents, especially mothers, know when their babies are

not normal; they are seldom fooled. It is best that their suspicions be confirmed by expert medical opinion as soon as possible, because the earlier they know the truth and the more help they get in accepting it the more security they can ultimately give their children. If an infant is hopelessly retarded, however, he should be placed in a public institution or under private care before the mother leaves the hospital. This is advisable as a means of protecting the mental health of the parents and other members of the family.

Security outside the home comes when the child is accepted by the community and the school. Unfortunately, most teachers resent a pupil who is mentally handicapped and make every effort to be rid of him. This is particularly true in those systems where the teacher is held responsible for a child's failure to make good progress and knows that she is judged, not by the success that he achieves within his individual limitations, but by absolute, arbitrary standards of excellence. For this, among other reasons, handicapped children need special educational facilities.

The second essential for mental health, which is a corollary to the first (security), is the opportunity for the child to grow up according to his own pattern. In order to meet this requirement, it is necessary for those who teach and care for the child to understand his growth patterns and to let their expectations be determined by his ability rather than by their hopes. They should help the child to get satisfaction from learning to do things up to the limit of his capacity, however great or small that may be. When adult expectations exceed a child's ability, he reacts by overcompliance on the one hand and overdefiance on the

A Psychology of Growth

other. These reactions, based on insecurities and accompanied by fear and resentment, lead to dependency or delinquency.

For all these reasons it has become apparent that mentally handicapped children require specially trained teachers and special educational facilities. Authorities also recognize that the best training has resulted from state programs that provide special aid to cooperating local school systems. Some states, notably Massachusetts and New York, have had programs for many years. More recently, Pennsylvania, Wisconsin, Ohio, Michigan, California, and finally Illinois, **have** begun to develop plans to meet the great need of the mentally handicapped. The different programs vary in detail, but they are based on the belief that retarded children attain the greatest mental health when they are kept in their homes or in suitable boarding homes and are trained in accordance with their individual capacities and scholastic needs. This system, of course, does not apply to children with extremely marked handicaps, intellectual, emotional, or both. For their training it is necessary to provide state institutions.

In the case of other children, several types of education are now offered. Provided that the teachers give handicapped children special consideration, many of them can continue in regular elementary school classes. Others, who have more marked handicaps, do better in special classes. When children belonging to either group reach the age at which vocational training is indicated, they receive the greatest advantages from special schools operating as part of the local school system.

A state protectorship, set up with public funds, may offer

further aid to the mentally handicapped. This protectorship, designed to provide such supervision, treatment, and training as each child may need, should function in cooperation with the parents, the community, and the local school system. It can be a means of relieving parents of much anxiety about the welfare of a handicapped child after they themselves are no longer able to supervise him and provide for him.

Proper care will help a child to realize all his capabilities, whatever they may be. The mentally handicapped child will not go so far as his normal brother, but there is no good reason why his emotional growth should be stunted or why he should be prevented from making a good adjustment to society. Children who have security and are allowed to grow up according to their own patterns develop habits of self-reliance, which give them the confidence and courage to face problems and to solve them. Unconsciously they develop good work, play, and health habits by doing the things that they want to do, in a program adapted to their individual abilities and emotional needs. Each one accepts responsibility for his behavior up to the limit of his mental capacity. The one who does not have the intellectual capacity to do the abstract reasoning and complicated thinking of normal individuals may still attain normal emotional growth and will usually accept adults' norms of right and wrong to a remarkable degree.

Thus fortified by security in the family and in the community, and by confidence in himself, the mentally handicapped child is ready to take his place in society. If society accords him that place and permits him to feel that he is needed, he will be able to complete a process of emotional

A Psychology of Growth

and social growth that transforms a once helpless and hopeless group into useful, productive citizens. It remains for labor and industry to accept these individuals and to give them the numerous types of jobs for which their home and school training have fitted them. Employment is a double-edged instrument which gives the individual self-respect and protects society from the delinquency and dependency of large numbers of people who might otherwise be public charges.

Unfortunately, a happy ending is not possible in every case. There will be some children who cannot grow up successfully because of adverse home conditions. Some children will need supervision by public agencies or placement in boarding homes; others will develop signs of delinquency and may have to be placed in state institutions. It should be possible, however, for the large majority to have mental health and to lead useful, happy lives.

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The School Child

The nurse is an important part of the school system. Proper health education is of great value as a part of education. Progressive educators teach children; other educators teach subject matter. Education is learning to get along with others, physical and mental well-being, development of special abilities and interests, and the right to realize one's ability and importance. During this period of growth, play continues to be important. War games, comics, magic, and motion pictures are valuable.

THE nurse is becoming an accepted and important part of the school system. This has come about because of the increasing emphasis on preventive medicine in present health programs and because educators as well as physicians recognize that physical growth is closely associated with mental development. The nurse is the intermediary between the educator and the physician, besides being the teacher of good health practices to children. She is aided by the fact that children, even more than adults, are interested in themselves and curious about their own bodies. They can be taught about themselves and can be shown methods of improving their bodies without having their unalterable defects emphasized. This implies that the nurse can distinguish between the innate constitutional

A Psychology of Growth

differences of normal children and physical defects that require medical attention. She should be able, with medical aid, to distinguish between small stature and underweight; anemia and light complexion; normal hyperactivity and "nervousness"; defective vision and poor visual memory; diets in the home that are adequate, although they do not follow the narrow nutritional food lists, and those that might cause malnutrition; as well as to recognize the signs of acute and chronic illness.

Much harm has been done to children in the past by using well-intentioned devices to force them to eat more food than they wanted or needed, and to gain weight beyond their capacity; by suggesting that all children have their tonsils and adenoids removed; and by giving advice contrary to that of their personal physicians. As a result, children have been taught that they were ill when they were entirely well; their unchangeable handicaps have been impressed upon them and their feelings of inferiority, produced by these physical handicaps, have been increased.

Health education in the school is best developed not only through the efforts of the school nurse but also by means of the health standards and examples set by the teachers and administrators. The daily program; the emotional tone of the classroom; the facilities for play, sanitation, and safety—all can be based on special consideration of the physical characteristics of children. Pupils can receive valuable information about healthy living through the attitude of teachers and nurses toward the care of accidents, illness that occurs in school, precaution against and control of communicable diseases, routine health examinations by the children's personal physicians, and planned instruction that

emphasizes simple physiology (knowledge about the body) and medical facts that they can observe for themselves.

Children learn more, for example, and are more impressed by seeing what happens when white rats are fed on different diets than by listening to boring lectures about eating spinach, which they may hate, or cereal, which may be nauseating to them. Another medium for helpful health education is found in motion pictures that take up the subjects of food and physiology and present them in an attractive and interesting, as well as informative, manner. Further information may be found in "Health Education."¹

PROGRESSIVE EDUCATION

Since the nurse's work must be correlated with the school program, it is necessary for her to understand and apply the educational methods of the teachers. During the past twenty-five years, there has been much discussion about progressive education, and the controversy continues. Progressive education was introduced by those educators who rebelled against the older method and substituted education as a part of growth and development for a system that was devoted to forcing children to act like "ladies and gentlemen" and to memorize set facts so that they might regurgitate them on examination papers.

The chief criticism of progressive education has come from persons who considered that this new approach meant that children should do exactly as they pleased in school and that, therefore, they would neglect those subjects in which they were not interested and thus fail to learn all that was necessary. Those who believe in progressive education feel that teachers can make schoolwork so interesting that, with-

A Psychology of Growth

out adhering to a rigid schedule, they will command the respect of the children and stimulate their interest.

In the progressive school, time is set aside each day for arithmetic or reading, for example, but no two children are required to do the same amount or quality of work. The rate of progress and the amount of help given by the teacher vary with the individual child. The pupil is praised for his accomplishments and, if he has difficulty, the teacher looks for the reason instead of criticizing him for his failure to come up to some set standard. The progressive school determines what a child should learn and finds interesting ways of teaching him that material.

The fundamental difference between the standard and the progressive educational system lies in the fact that the former teaches subject matter, the latter teaches children. Hughes Mearns,² Elizabeth Hubbard,³ and others have demonstrated that, with few rules and regulations in the classroom, they could interest pupils and stimulate them to do things far beyond the previously estimated capabilities of children. Most schoolteachers, however, do not possess this ability and find it necessary to have definite study periods and assignments. This method can be followed successfully if the teacher observes and takes into account the growth and development of each individual child. It represents progress in education comparable to that which has taken place during the same period in medicine and other branches of science.

The progressive school will be in harmony with the nurse's ideas, because its curriculum is built in accordance with recent data presented by medical science. Growth follows the same general principles during the school years

as in any other period and the progressive educator, no less than the nurse or the physician, knows that it is not uniform and that no two children are alike. In the past we had to accept the self-evident truth that six-year-old Johnny was three inches taller than Jimmy, who was the same age; but because no difference in mental stature was visible to the naked eye, we expected one of them to learn to read merely because the other had that ability. Assuming that there was a definite time when every child should read and write and learn decorum, the old-time teacher considered school a place where the same set of facts was forced into the minds of all children, and rigid adult standards of behavior were imposed upon them, just as home was the place where the young were forced to eat and to obey orders with military promptness. According to present concepts, education is the process by which the individual develops his mental and physical usefulness while becoming acquainted with himself and the world, and gaining knowledge necessary to an understanding of both. Washburn ⁴ says that education is (1) learning to get along with others; (2) physical and emotional well-being; (3) the right to health and happiness; (4) the right to develop special abilities and interest, that is, the right to be different; (5) the right to realize one's own organic unity.

In the school, as in the home, the child's greatest need is security. When he enters school, the teacher becomes a substitute parent; and, as Elizabeth Hubbard points out, she should make each youngster feel that she wants him and approves of him. Like the parents, she must accept each child as he is, recognizing the fact that he has certain individual, unalterable characteristics. Just as no expert

A Psychology of Growth

would mistake Mary's fingerprints for Betty's, so the intelligent teacher will note differences in their physical characteristics, besides varying degrees of motor coordination and mechanical skill, and will base her expectations of performance upon their capacity rather than upon any arbitrary standard. The same thing holds true in regard to individual differences in mental capacity and the intellectual attributes that determine each child's ability to handle the different school subjects. Emotional responses, which vary as widely as physical and mental characteristics, result from innate qualities and emotional patterns acquired in early childhood.

The needs of the school child are the same as those of the infant, but the former does not require immediate satisfaction. Whereas the infant wants attention the instant he is hungry or cold or frightened, the school child is able to wait a short period for the fulfillment of his needs. The postponement does not lessen his satisfaction. This ability to derive satisfaction from delayed responses is a sign of mental growth.

After the child has mastered the simple problems of building with blocks, shoveling sand, and coloring pictures in his paint and crayon books, he finds that he has exhausted the pleasures to be found in these pursuits. It is no longer enough for him to play with simple toys and run up and down by himself; he looks for other activities and finds satisfaction in performing more complex and more difficult feats. He wants to go to school and he wants to learn. It is fun to read and write and spell, to work with other children, to play more involved games, and to find a greater outlet for his individual abilities. The school, therefore, is

able to make his mental growth a continuous process by offering progressively complicated problems, which at once grow out of the pupil's past experience and arouse the curiosity that will lead to further intellectual exercise.

Self-expression, which Washburn gives as a second basic need of every school child, has already been described. It is the child's performance of those acts that make him feel useful and give him satisfaction in his accomplishments. While he is expressing himself, and in the process of learning new skills, he is also establishing further habits of self-reliance. As applied to school, self-expression involves putting materials together in new ways and taking responsibility for assigned work. Every normal child will get up in the morning, dress, eat breakfast, and go to school on time if left to his own devices. Provided that the expectations of the school are within his capacity, he will take full responsibility for his classroom work without any prodding by his parents. Indeed, his need for self-expression is a greater force than any parental cajolery and provides stronger motivation for study than do any exhortations.

The child's third great need during the school period is social integration. This is best achieved by means of play, in course of which lessons are learned through actual experience in handling materials, dealing with contemporaries, and making necessary adjustments. Organized play with limited supervision stimulates mental growth, adds to the child's independence, and helps to channel his interests along the lines of his individual aptitudes. If we are to preserve his mental health, we must let him play those games that conform to his emotional characteristics. Sometimes the games may seem cruel or uncivilized and

A Psychology of Growth

altogether unfitting for little ladies and gentlemen, but suppressing the games does not eradicate the emotions that prompted them; permitting the games gives the child an opportunity to dissipate emotions that are not likely to be harmful except when they are kept locked up within himself.

The war games, which are often the delight of the nine-year-old and the despair of conventional adults, are extremely helpful to the participants. Such games do not manufacture animosities and bloodthirstiness; they are an outlet for the child's preexistent resentments, a dramatization of mental conflicts between good and bad, the child's normal wishes and the demands of society.

It may allay some adult fears to mention an incident recently reported in *The New Yorker*. A mixed group of white and colored boys who were in the habit of playing together, proposed a new game, race riot. Plans for the game went well until the boys discovered that there were more whites than Negroes. This, they all agreed, was unfair; so some of the white boys offered to play that they were colored, thereby making the two sides equal in number. That being arranged, the riot proceeded to its amicable conclusion. Of course, it should be remembered that the sense of fairness displayed by this group does not always hold. Young boys and girls commonly have too many resentments, born of feelings of inadequacy and lack of approval; they get satisfaction from picking out a single child or a minority group to torment. For this reason, playground supervisors are valuable.

At about the time when children reach the second grade in school and continuing until puberty is reached, they go through what has been described as the "almighty" stage of

growth. They exude confidence in themselves and regard their own conclusions as supreme authority. Advice from grownups is unwanted and ignored. A boy becomes primarily interested in other boys and a girl, in other girls. Both are far more interested in the ideas of their comrades than in those of their parents or teachers. Any amenities that once they may have imitated now tend to disappear. If manners, cleanliness, honesty, or consideration for others meant anything to them in the past, they no longer do so. The conservative school, which emphasizes social graces on the report card, indicates a fundamental lack of understanding of normal children.

It is necessary to understand children's minds in order to answer many of the questions that puzzle and trouble their mentors. Among these are problems concerning comic books, motion pictures, and the radio, in relation to the six- to eleven-year-old schoolboy and schoolgirl.

Many laymen and lay organizations have expressed great fear that comic books lead to anxieties, delinquencies, and confusion in children's minds. Fifty years ago, adults expressed that same concern about the assumed evil influence of the popular dime novel. In the opinion of Bender and Lurie⁵ comic books are comparable to the mythology, fairy tales, and puppet shows of past ages. As they have come down through the years, fairy tales have brought the same thrills to generation after generation of children (and none have been the worse for them). Jack and the Beanstalk, Cinderella, Alice in Wonderland, and now Superman are living literature, in that they express emotions that the human mind can readily understand.

The comic book was developed for the preadolescent

A Psychology of Growth

child. He has accepted it eagerly and used it as an emotional outlet. During the preadolescent period especially, the child feels his weakness, smallness, and other limitations, on the one hand; on the other, the revelation of his growth pattern (aggressiveness). Because his war games, his investigations of haunted houses, his attempts to dig secret tunnels and to find buried treasure do not wholly satisfy him, he escapes into fancy. The omnipotence of Superman and other characters who possess immeasurable strength and resourcefulness, as well as magic wings and magic carpets for limitless flight, fulfill the wishes of boys and girls. Magic, radio, and death-dealing rays, with which comic-book heroes combat the forces of evil that confront them, offer a dramatic solution to the problems in the minds of preadolescents. One magazine on magic is reported to have a circulation of nearly one-half million copies a month.

In comic books, bad people and destructive forces are forever opposing good people and constructive forces. In the child's mind, too, there is always a conflict between good and bad, right and wrong. When he attacks his own problems he becomes aggressive and ambitious and tries to build up his own importance, but at the same time he recognizes his weakness and his limitations and keenly feels the competition of others, which is the use of aggressive forces against him. The battle that rages in his mind develops in the child a sense of guilt and a feeling that he deserves punishment. The comic book dramatizes this personal battle and gives the child an emotional outlet; the invariable triumph of comic-book right over comic-book wrong brings him satisfaction.

When millions of children will spend a dime or several

dimes every week for comic books, it may be because these books supply something that these young people need badly. That something is a release for strong, baffling emotions. Those comic books which fulfill this need are greatly in demand; those which fail to do so go into the discard. From the point of view of the adult, therefore, they are a fairly accurate index to the problems in the child's mind.

The boy or the girl who is disturbed by reading comic books is the insecure youngster who was already disturbed before he started to read. Prohibition of the books will not solve his difficulty any more than addiction to the books can be said to cause it. He should be allowed to read the stories if he cares to, but he should have sympathetic help from adults who try to understand his feelings.

A mother who brought a bright but apprehensive nine-year-old boy to a physician because of nervousness ascribed his condition to "those terrible comic books," radio programs, and motion pictures. Careful studies, on the other hand, indicated that Jimmy's difficulty was due to the parents' unreasonably high standards. If he had carried out their wishes, they would have eliminated much of his childhood. They wanted him to read "good literature," to get high grades in school, and to be a "little gentleman." Fortunately, Jimmy showed signs of "battle fatigue" and the parents, to their credit, realized that something was wrong and that the boy needed help. They were willing to change their program and, when they permitted the child to do things that they had previously forbidden (even to swear a little), his nervous signs disappeared. Ten years later, the mother proudly reported that her son enjoyed good books.

A Psychology of Growth

Like the comic book, the motion-picture play has caused much alarm. Thoughtful adults are continually wondering whether children will become criminals as the result of seeing gangster pictures or soldiers of fortune patterned after heroes of adventure plays. In answer to this question, we get an emphatic No from Dr. A. A. Brill,⁴ an outstanding psychiatrist, who has made extensive studies of motion pictures and criminality. "In my psychiatric experience," he says, "I have never seen a male or female who has committed any crime because of something he or she has seen or read. It has often been said that there is such a relationship but these statements are not true." According to Dr. Brill, children of eight to twelve years enjoy the motion pictures because they have strong, repressed emotions that are vicariously relieved by melodrama. For this reason, the motion picture is useful to the child, rather than harmful.

In common with the comic book, the gangster motion picture portrays a battle between good and evil, and good always wins out. Actually the lessons that these motion pictures teach are more acceptable—probably more valuable and surely less harmful—than the nagging that adults inflict on most children.

The value of motion pictures was illustrated by the case of a ten-year-old girl who was very "nervous"—that is, tense and afraid to go into a dark room and to go to bed alone. She was an insecure child, unprepared for preadolescence, and her nervous behavior followed sex play and the experience of being scared by an older brother. One of the things that had made a great impression on the little girl was a motion picture in which a good man saved the life of

a bad man. The latter tried, in turn, to kill the good man, who was saved at the last minute, while the bad man was killed during the attempted crime. The girl enjoyed repeating this story and told it at least thirty times. Although she never gave the details twice in the same way, she invariably brought out the struggle between the good and bad men and the fact that the good man always won. Her repeated discussion of this motion picture became the basis for the physician's treatment of her difficulties and thus her rapid improvement was due—at least in part—to the motion picture.

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Fears

Fear is a primary emotion, valuable or a handicap. Loud noises, sense of falling, insecurity, and lack of approval are the most common causes. Medical fears are common. Nurses can allay much of the fear of their patients. The seriousness of a situation (amount of fear in the child) depends upon the attitude of parents. It is also influenced by the condition of the child's mind at the time.

FEAR is a primary emotion based on one of the strongest instinctive forces that motivate behavior, self-preservation. Without fear, the individual would not long survive. It is, therefore, one of the most valuable attributes of the living organism. Nevertheless, the person who deals with children should always remember that excessive fears impede normal growth and development and make it extremely difficult for the individual to adjust to his environment.

Evidence of fear is present from the moment of birth. The infant responds, by crying, to the insult of being cast into the world. The sense of falling and, as soon as the mucus is absorbed from the middle ear, loud noises will cause him to protest. In these reactions it is difficult to differentiate between fear and resentment. They are closely allied; but whether, as some psychologists believe, the in-

dividual is first frightened and then angry, or the other way around, fear is certainly one of the baby's earliest reactions.

Two other causes of fear in infancy and childhood are lack of security and uncertainty. The infant is distressed and shows signs of anxiety when he is separated too long from his mother. The period varies at different times of the day and in different infants from thirty minutes to several hours. As soon as the baby has grown intellectually to the point where he can recognize individuals as such and actively protest, he shows his fear by crying when strangers approach, becoming especially disturbed if they try to hold him. This reaction begins when the child is four to six months of age and, as he gains strength, increases in violence up to eighteen to twenty-four months.

The dispersal of thousands of families as a result of war conditions amply proved the closeness of the relationship of the child to his parents, particularly to the mother. In fact, the effects of separation were so injurious to children that it seemed best to keep the younger ones with their mothers, even when there was danger of the most disastrous air raids.

Since fears are readily communicable, babies often acquire them from contact with persons who are frightened. The mood of the baby also parallels that of the mother, with the result that anxious mothers have anxious babies. Such infants are usually more tense than others and, therefore, are easily disturbed.

Changes in routine, living conditions, and surroundings stimulate anxieties in infants and young children, as is illustrated by the following cases.

A Psychology of Growth

A nine-month-old baby was happy and contented and slept well until her mother rearranged the furniture in the nursery. It was later discovered that the new arrangement placed the baby's bed in such a position that light shone on it and she could see reflections and shadows from the street. When her bed was returned to its original position, she again became a contented child.

Fifteen-month-old John, who was taken to visit his grandparents, accepted the new bed and strange surroundings so easily that on the first night of the visit he fell asleep at the usual time. That night there was a electrical storm. Thunder and lightning had not previously disturbed the child, but now he was very badly frightened; he could not feel secure in new surroundings during a storm. Thereafter, for several years he awakened and cried when he heard thunder or other loud noises in the night.

Worried grandparents sent for a physician because an eighteen-month-old grandchild, with whom they had been walking the floor, had not slept for twenty-four hours. She refused to eat, cried when put to bed, and expressed acute unhappiness. Even when she was held by her grandparents, her pupils became very large and she showed all the physiological signs of fear.

The baby's history revealed an emotionally disturbed mother and serious discord between the parents. The mother had precipitated the immediate trouble by suddenly going out of the city and leaving the baby with the grandparents. They had not seen much of the child and their small, dark apartment contrasted most unfavorably with her own home. It seemed advisable, in those circumstances, to place the baby in a hospital, assign very fine

student nurses to care for her, and instruct them to sit down and hold her as often and as long as she wanted to be held. In spite of the strangeness of the hospital and the new conditions in which she found herself, the baby felt enough security and confidence in the nurses so that she slept, the first night. In two days she was entirely normal.

Another little girl, twenty-six-month-old Alice, swallowed some medicine, which her mother thought was poisonous. The child was rushed to a hospital, where her stomach was washed and she was kept for a week, to make sure that no signs of poisoning would develop. During that week she saw her mother only two or three times and, on each occasion, little Alice cried violently. After she left the hospital, she was irritable, cried frequently, followed her mother around the house, refused to take a nap, and never fell asleep until late at night. Well-meaning friends suggested to the mother that the nurses had "spoiled" the little girl.

To the physician it was obvious that the cause of the trouble was the child's anxiety. She had been seriously disturbed by her mother's terror when she discovered that Alice had taken the medicine. The experience of being rushed to the hospital and having her stomach pumped, followed by the week-long, almost uninterrupted separation from her mother, had been a very frightening ordeal for the child. This was explained to the mother and she was advised to hold the little girl on her lap and rock her as much as she wanted to be rocked. After a few days of this treatment, she began to show improvement and, within two or three weeks, she was practically normal again. For a long time, however, she was frightened unless her mother took her along whenever she left the house.

A Psychology of Growth

The same kind of care brought favorable results in the case of another little girl. This two-and-a-half-year-old began wetting herself during the day, sucking her thumb, and crying a great deal, after her mother went away on a trip. Clearly, the sudden disappearance of the mother created anxieties in the child's mind. The nurse in whose care the mother had left the little girl was a reliable woman, but rather stern. Her strict discipline did nothing to dispel the anxiety that the child suffered as the result of her mother's sudden departure. Restored security, brought about as the result of more affectionate treatment by the nurse, and the mother's return caused the child's behavior to improve in a few days. In six weeks she seemed entirely well again.

Similar cases come under the frequent observation of every nurse and physician. It is easy to make the mistake of attributing such behavior problems to overprotection and overindulgence. Careful analysis, however, reveals that the root of this particular evil is anxiety produced by some definite situation that has diminished the child's sense of security and confidence in his parents.

Many other anxieties spring from a child's contact with persons outside the home, and not a few of these have a medical basis. Since a child develops an anxiety when his movements are restricted, it is necessary for the nurse to be careful not to hold him too tightly when the physician is making an examination. Furthermore, the young child is less frightened when the mother or the nurse holds him gently than when he is placed on an examining table. For that reason, the nurse should hold him in her arms when

he is receiving an inoculation or any other treatment that disturbs him.

In dealing with older children, we should take into account the ancient fears aroused by the thought of illness and death and the innumerable superstitions that, even today, are strong in the minds of many parents. An unfortunately large number of persons still hold the view, which was almost universally accepted a hundred years ago, that illness is retribution for some disobedience of the laws of nature or of parents. Every day, mothers and fathers use this concept to warn their children of the dire consequences of their acts or to assure them that their illnesses are punishment for their sins. When Ralph has a cold, his mother says: "It serves you right; you didn't mind me and wear your rubbers. If you weren't such a bad boy you wouldn't be sick." When Jean persists in running out into the garden, her father says, "If you don't listen to me and stay indoors you'll be sick and maybe have to go to the hospital."

Children with heart trouble often say that they are ill because they ran about more than their parents wanted them to, and diabetic children explain that they became ill because they paid no attention when they were warned not to eat too much sugar. Disobedience of parental injunctions not to play too hard, get wet, chilled, or overheated is believed by many children to be the reason for their illnesses. In other words, they are sick because they have been bad, and if they are very sick or have been very bad, they may die for their misdeeds. This belief in the relationship between disobedience and illness can easily

A Psychology of Growth

become the source of anxiety in children and produce serious disturbances.

In many cases, hospital experiences also lead to anxiety states, and not without cause. Threats of hospitalization, with which misguided parents sometimes try to govern sick children, make the hospital seem a terrible place. So also do the gruesome stories that children often overhear and the recitals of other children who have been hospitalized and who delight in exaggerating their most unpleasant experiences. The average child, therefore, is frightened by the mere concept of the hospital. Treatment in one often confirms his worst fears. The hospital, at best, is not the most pleasant institution. Operations and the care of the sick are its business; deaths do occur. The sights, sounds, and smells that greet the incoming patient are not reassuring. When a child finds himself in this alien environment, separated from his parents, and feeling that he may never see them again, he naturally becomes terrified.

The fear of never seeing parents again, which is particularly prevalent among charity patients, may have serious consequences, even after the child returns home. Such was the case with nine-and-a-half-year-old Louise, who, three weeks after she had been discharged from the hospital, began to have spells in which she would tremble, cry, and sometimes ask, "Where am I?" Inquiry into her hospital experience revealed that she had been placed in a contagious ward for treatment during an attack of scarlet fever. The strange room, the uniformed attendants, and the suspicion that she might never see her parents frightened her badly. When she cried, the nurses scolded and told her that if she did not behave they would lock her in a room

by herself. After she had been assured that no one would hurt her, she was given serum intramuscularly. Later, she developed an ear infection. Again she was told that she would not be hurt and then both eardrums were punctured. She was very ill and spent some weeks in the hospital. Because the sight of her parents caused her to cry bitterly, they were told to look in on her only when she slept. This apparent desertion convinced her that she would never see her family again.

The effects of such a terrifying experience persisted after the girl's recovery and discharge from the hospital. In the safety of her home, she would imagine that something was going to happen to her and would experience again the sensations that she had known when the doctors and nurses had examined and treated her in the hospital. The result was the recurrence of uncontrollable trembling and crying.

This little girl was treated over a period of two and a half years, with the excellent cooperation of her parents, and results were fairly satisfactory. The parents and the physician spent much time playing with the child and rebuilding her confidence in them and in nurses. They urged her to describe her hospital experiences and to talk about her fears and her hatred of those who attended her. She told repeatedly that her parents had often threatened to take her to the hospital and leave her there if she did not behave, and it was for this reason that she had thought she would never see them again. In time, she realized that, because of her fears, she had caused trouble and had given the nurses some justification for their sternness. Everyone admitted that the parents, physicians, and nurses had lied to her and, as in the case of all children, her own self-confidence was

A Psychology of Growth

bolstered by the knowledge that not even these superior beings were always infallible and absolutely truthful. It reassured her to find that her elders did not betray her again and that, as she grew older and wiser, she could usually tell when they were "fooling" her. Later she had her tonsils removed without undue anxiety.

Misunderstanding and uncertainty cause unnecessary and unsettling fears. An eight-year-old boy became disturbed after a circumcision because his mother had told him facetiously that they were going to "cut it off," and he believed that his penis had been amputated. A boy of eleven, who was somewhat backward mentally, became a serious behavior problem following an operation on his hand. Bandages covered the whole area and the child believed that the physician had amputated his hand.

Since fear reactions are almost inevitable in the case of children who are removed from their parents and placed in strange institutions, which they do not understand and where they cannot feel comfortable, nurses and physicians, as well as parents, should give full consideration to the implications of hospitalization. Even a simple operation, such as the removal of tonsils and adenoids, may be the source of a painful emotional experience if there is not careful and intelligent management.

Parents often make the serious mistake of telling the child many silly falsehoods about his coming operation and encouraging him to think of it as a kind of party, where he will meet other children, be highly entertained and offered all the ice cream and cake he can eat. When the time comes, he is dismayed to find that he must go to the hospital early in the morning without a bite of breakfast. At the

door he encounters that peculiar medicinal odor common to hospitals. The usual entrance procedure is not reassuring, and when it is concluded, the child learns that he has to undress and go to bed. If he is a charity patient, his parents are told to leave. The nurse's statement that he will be all right and that mother and dad can come back later does not allay his mounting fear. The fact remains that he is alone in an unknown place, surrounded by strange people in unfamiliar white uniforms. He may even be so unfortunate as to be under the care of "professional" nurses and doctors, that is, those very strait-laced, unemotional, efficient women who, happily, are fast disappearing, and those equally aloof physicians who grunt rather than talk. (The distinguished psychiatrist, Dr. Frankwood E. Williams,¹ classified this behavior as infantilism.) At any rate, the small patient now realizes that he is not going to a party and that his parents have lied to him. Robbed of the security that had been based on confidence in his parents, and beset by all the uncertainties of an inexperienced and uninformed person in an unfamiliar situation, he is provided with innumerable fear stimuli.

This, moreover, is only the beginning. Next the child is jabbed in the ear, to have his hemoglobin taken. After that he is wheeled to the operating room, where the people are dressed like ghosts and many shiny instruments are laid out for them to use. The doctors are intent on their preparations, and unnecessary operating-room discipline prevents anyone else from speaking to the forlorn child. Now he is placed on an operating table and forcibly held down while he receives the anesthetic. However carefully an anesthetic is administered, it produces a certain amount of asphyxi-

A Psychology of Growth

ation; since it is sometimes given to children by inexperienced assistants, the effect may be little short of strangulation. When the patient wakes up feeling sick, there is no mother to soothe him. No one pays attention to him except a strange nurse, whose attitude may be unduly stern. A child never undergoes this experience without feeling frightened.

To be sure, some children must go to the hospital and, in course of their treatment, must suffer unavoidable pain. The amount of fear that these experiences stimulate, however, can be reduced at least 75 per cent by intelligent management of the patient. First of all, parents, physicians, and nurses should never lie to a child about these procedures or lead him to expect impossibilities. Before the day of the operation, the parents or the doctor should tell him that he is going to the hospital, should explain its purpose and nature, and should let the child know exactly what is going to happen to him. This can be done without exciting alarm. Then, when the child who knows what to expect finds everything to be just as described, he has confidence in his nurse and his physician and the comfort of knowing that he can believe them when they tell him that he is going to be all right. This child contrasts sharply with the one who has been deceived. The latter, after he has found pain where he has been promised pleasure, loses faith in everybody and, when he is told that all is well, he has no means of knowing that this statement is not an untruth like the other tales that preceded it. Instead of having his initial fears allayed, he has acquired new ones.

When children are uncertain, they can develop almost

unbelievable ideas, which, in turn, aggravate their normal apprehensions. Eleven-year-old Jim presented a good example of this tendency. He was a boy of normal intelligence who went from a small town to a hospital in a large city for examination and beginning orthodontia. All through the trip he was negativistic and when he reached the hospital he cried and refused to allow physicians to examine his mouth. His pupils were very large and he was unmistakably frightened. Asked what he was afraid of, he cried again and said, "What are you going to do to me?" The psychiatrist told him that he wanted only to talk to him, and began by asking the boy to tell what he thought was going to happen. After some urging, Jim explained that he thought the doctors were going to put a "draft" in his mouth. Since a draft, as he understood the term, was a current of air such as that caused by opening windows, he imagined that the physicians intended to put a hole in each lower mandible so that air could blow through his mouth.

The origin of this idea was a conversation between Jim's parents and the family physician. The boy had overheard a discussion of his case in which someone used the word "graft." Jim had misunderstood and, from the supposed word "draft," had drawn his own appalling conclusions. After he had revealed this misunderstanding and the psychiatrist had carefully explained the prospective orthodontic procedure, Jim's fears disappeared and he became very cooperative. Thus in thirty minutes the boy was relieved of his anxiety and the physicians were saved much more than that amount of time in their examinations and initial treatment.

A Psychology of Growth

A child's psychological preparations for an operation and other hospital procedures, therefore, should be carried out with the same precision that is applied to surgical preparation. If the child has not been prepared by the parents or the physician, the nurses should take the responsibility for helping him to understand exactly what is going to happen and how it is going to be done. In addition to making this verbal explanation, it is helpful to take the child to the operating room the day before the operation, in order that he may see what it is like and be spared the painful fears of the unknown. If he is allowed to smell the gas, he will learn that, while it is not pleasing, neither is it distressing or to be feared. Another valuable—and safe—procedure is the administration of a sedative, such as nembital, the night before and again thirty minutes prior to the operation.

Children who are more than four or five years old accept operations without difficulty if they have confidence in their parents, nurses, and physicians. Such was the case with ten-year-old Jack, who had osteomyelitis of the femur. He was frightened and in pain. When his physician told him that he had an infection like a boil in the bone of his leg, the patient asked, "What are you going to do to me?" The physician explained that they would take the boy to the operating room and give him something to smell that would make him go to sleep, after which he would not feel the opening of the leg. "O.K.," said the boy.

A few days later, a focus developed in the other end of the femur and pain returned. The physician told Jack that the previous condition was present in another place,

and again the patient asked, "What are you going to do to me?"

"The same thing as before," the physician answered.

"O.K.," said Jack, entirely willing to have another operation and showing no signs of undue anxiety.

Of paramount importance also is the attitude of the nurses in charge. Their management of a child, or, for that matter, of any patient, can make all the difference between distress and peace of mind. The nurse becomes a substitute mother and the extent to which she can make a child comfortable depends upon her ability to impart a sense of security, based on the comforting assurance that she likes him and that he can trust her. It is her first duty, then, to win the patient's confidence. She can accomplish this best, in the case of a child, by sitting down beside him for a few minutes, playing with him, showing him that she likes him and that he can expect to enjoy doing things with her. A nurse who does not like children or who does not like a particular child should be allowed to report those facts to the head nurse or to the nursing office and should not be required to take care of any youngsters or of the particular individual, as the case may be.

It is essential, also, for nurses and physicians to remember at all times that patients are frightened and that unreasonableness is a consequence of feeling ill and distraught. The nurse must take an objective attitude toward her patient's behavior and remarks and never, under any circumstances, construe them as a personal affront. She cannot hold this point of view, of course, unless she has confidence in herself.

The effect of a potentially frightening experience is

A Psychology of Growth

determined by the circumstances under which it occurs and the condition of the child's mind at that time. A loud noise, for example, or some chance remark that would not disturb the child at all if he heard it in the security of his home, may frighten him badly when he hears it in the hospital. He may develop a fear of the dark if he is placed in an unlighted room for punishment, although darkness would hold no terrors for him if it were not associated with the feeling that he is bad and that grownups do not like him. Fear of the toilet may develop when an anxious grandmother, for example, places the child there and communicates her own concern. Another child may acquire an intense fear of water, as a result of being taken into the lake by a playmate in whom he has no confidence. In these and similar cases, it is insecurity preceding disagreeable experience and coupled with it that precipitates the new fears. In addition to the unhappiness that they cause, these anxieties based on insecurity make for persistent concern over sex matters, bowel problems, fear of the dark, fear of being alone, fear of illness, fear of fire engines, fear of animals and of many other things.

Injudicious parents often build up additional positive fears by telling a child that they will go away and leave him or that they will call the policeman to deal with him or that his actions will have some dire consequences. Other parents produce similar results by telling a child that everything he does is bad and that he will be punished for his sins, by constantly pointing out the virtues and talents of another child and thus implying adverse criticism, and by expressing dissatisfaction when a little son or daughter is unable to do the things that are expected.

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Causes of Behavior Problems

Parental attitudes are the most important cause of behavior problems. Some children are rejected by one or both parents. Parents commonly see defects in their child's behavior, which represents a problem in their own minds. Hostility toward children may also be due to the insecurity of the parents themselves, as well as to fatigue and financial problems. Parents wrongly humiliate their children in front of others. Another cause of misbehavior is insisting upon standards that are too high for the child.

BEFORE taking up the more serious behavior problems of children it may be well to consider the environmental conditions that provoke them. "As the twig is bent the tree's inclined" is a truth long recognized and, in many cases, acted upon all too fully. Modern psychology has shown the dangers of bending the twig and the desirability of permitting it to grow according to nature's pattern. We have seen the child reach normal emotional growth and retain his mental health when he has not been bent to his parents' will but has been given security, standards of behavior in conformance with his abilities, and the right to assume those responsibilities that he is capable of handling. If these requirements are not fulfilled, the child tends to deviate from what is considered normal conduct and begins

to exhibit behavior problems. The underlying cause may be an inherent defect that makes a good parent-child adjustment impossible or it may be lack of environmental advantages; but the results are the same.

When a child who is driven by forces within himself in the form of growth energy attempts to gain satisfactions in life and is thwarted in his efforts, his behavior is likely to be the kind that is usually called abnormal. As Plant ¹ has said, it is not a case of abnormal behavior in the child but normal behavior in an abnormal environment. Since parents' attitudes are the foremost environmental factors affecting children's behavior, it is well to look to them for the common conditions that interfere with normal growth.

Babies are not universally guaranteed the rights of life, liberty, and the pursuit of happiness. Bernfield ² has pointed out, as have others, that in primitive societies babies are not always guaranteed even the right to live. "We must realize," he writes, "that our present attitude toward the child, the present value we ascribe to life, is the result of long psychological development. Not all races and civilizations feel that birth guarantees a child the privilege of living, not all regard the death of the child as a disaster, or the killing of the child as a crime. The number of tribes who, on principle, kill a percentage of their children, a category (perhaps the first born) or a group (perhaps the weaklings), is very large and the motives very various."

Bernfield goes on to say further that the protection of the infant in our civilization is due not to the absence of hostile feelings but to economic social pressure. Parents who do not want children and who are resentful toward them at birth are not uncommon. They seldom express these feel-

A Psychology of Growth

ings, of course, except to a psychiatrist who is alert to the possibility of their presence and whom the parents trust because they know he will respect their confidences. This hostility is accompanied by a sense of guilt and usually the parent goes to extremes of superficial indulgence in an effort to compensate and to prevent the feelings from becoming apparent. Such a situation is frequently at the bottom of serious behavior problems and children's anxieties.

Nurses and physicians often discover this hostility through the utterances of mothers during labor. "I hope this will be the last," a mother will say, or, "I'll never go through this **again**." Other examples are such frequently heard remarks as, "What a woman has to go through!" "Having a baby is like laying an egg; now I can go on with my work [profession]," and "If it hadn't been for his father I wouldn't have all this mess."

This hostile attitude toward children was clearly responsible for the troubles of a nine-year-old girl who complained of headaches, was very restless and dissatisfied, and refused her mother's affection. She was the third pregnancy, the first two having been voluntarily terminated with abortions. In discussing her problems, the mother said, "When my husband and I were married I was determined not to have a child, but with the third pregnancy I decided to have a family." Later she added, "It is true that I never liked children and did not want them, but at last my husband and I decided to have a family. It was the thing to do." The result could easily have been foreseen: an insecure problem child. She now refused her mother's attempt to give her affection because she felt it was not genuine.

Some mothers like children when they are babies and do

not care for them as they grow older. This was true in the case of Bruce's mother. At the age of five and a half he was given to much crying and expressed many fears, particularly in relation to his mother. He often asked if his grandmother's house was on fire, if his own house would burn down, if his mother had enough money, and if she was going out without him. He always wanted to help his mother and run errands for her in the house. A careful history revealed that the mother had nursed Bruce until he was nine months old and had given him much affection. His growth had been normal until a second child was born when Bruce was three years old. At that time, the little boy's behavior underwent a marked change.

This was not a simple case of jealousy. When the mother was questioned further, she admitted that she was one of those women who like children only during their infancy and stop caring for them when they are big enough to run about. For that reason she had stopped giving affection to Bruce and lavished it all on the new baby. She did not realize that the little boy's fears and the so-called naughtiness for which she had been punishing him were due to the change in her own attitude and his resultant insecurity.

Another frequent expression of a mother's hostility is her refusal to nurse her baby. She usually tries to conceal her real reason for not wanting to nurse the child by saying that it will interfere with her social activities, or by making other excuses. One mother, who had plenty of breast milk, steadfastly refused to nurse her baby in spite of the arguments of her obstetrician and his rising anger. Pressed for her real reason, she finally explained that when she put the baby to her breast she hated him and felt sure that if she

A Psychology of Growth

had to give him breast feedings she would always hate him. Since she refused psychiatric help in order to learn the underlying reason for her attitude, the baby was given artificial food. This mother was an intelligent woman and tried very hard to give the baby good care; nevertheless, when the child was examined at the age of four, it was found that he cried a great deal, did not eat well, sucked his thumb much of the time, fought against going to bed, had night terrors, and still wet the bed.

A student nurse evidenced the same attitude. During the course in psychology she voiced serious objections to breast feeding and said that she would not nurse her children. She brought up the question of breast feeding several times while the course was in progress and her attitude never changed. Some months later, when giving a baby a bottle in the hospital, she held the infant on her knees as far from her body as possible with his neck resting on her left wrist and the bottle held in the right hand, almost at arm's length. All during the feeding she was looking around the room, obviously bored with her job. It is not difficult to guess what kind of children she will rear.

Many parents make up their minds in advance that they want a boy or a girl, a blond or a brunette. When their babies do not meet their specifications—and they usually do not—the parents are greatly disappointed and often find it difficult to accept the infant who is born to them. “Oh, it had to be a girl!” they say, and, “I don’t want him; I want a little girl!” “I don’t know anything about boys,” a mother will say. “I can’t bring one up.” A father will exclaim, “Why did we have to have a little shrimp like

this?" Such attitudes are signposts that point to future behavior problems.

Frequently resentments stem from some characteristic in the child that a father or a mother associates with a person whom he or she dislikes. This is particularly true when there is discord between the parents. More than one mother has said, "I would rather see my boy dead than have him grow up to be like his father." That is an honest expression of attitude toward a child who resembles the father, whom the mother hates. Nearly all parents observe that "Sonny" walks like his paternal grandfather or uses his hands the way Aunt Florence uses hers, or that "Sister's" posture is the counterpart of Cousin Ann's and her laugh might easily be mistaken for Cousin Carol's. It is most unfortunate when the parent dislikes the relative whom these mannerisms suggest, because in that case the resemblance stimulates resentments toward the child.

Such was the difficulty in the case of nine-year-old George. His mother reported that he was unruly and inattentive in school, that he fought with children in the neighborhood and stayed out late. Inquiry revealed that the child was George, Junior, and that he closely resembled the father, from whom the mother had separated when the baby was nine months old. Her second marriage was also unsuccessful and, in her unhappiness, the mother's resentment toward the child increased further. She asserted that every time he displeased her she saw his "no-account father coming out in him." "I get so mad at him," she admitted, "that I can't whip him myself. I ask my husband to do it for me." She also reported (this was not

A Psychology of Growth

confirmed) that the head of George's school refused to take him back after an absence until his stepfather had spanked him in the school office. His teacher was said to have suggested that a good method of punishment would be to make the small boy kneel all day. Naturally, therefore, George felt that everyone hated him. He was frightened and insecure; and it was not surprising that he ran away from home. This is an extreme case, but it illustrates conditions that, to a certain extent, are behind many behavior problems in a large number of children.

Hostility toward children does not necessarily mean that their parents did not want them. It may be due to insecurity in the parents themselves, fatigue, economic worries, and lack of information about rearing children. A mother who has two or three small children and does all of her housework becomes overfatigued and irritable, especially if she is not very strong. A father who works long hours or has serious financial worries finds that it is hard to be patient with children and to enjoy their company. Normal children do many things which, though neither wrong nor harmful, are disturbing to adults. Such actions often bring about a very unwholesome attitude on the part of parents who are already disturbed for other reasons. Attempts of the parents to restrict their children's normal (though irritating) behavior result in added friction and reinforced hostility.

Anyone who analyzes the behavior problems of children would do well to keep in mind two questions: (1) What do parents see in a child that is not there but that represents a problem in their own minds? (2) What attitudes are the parents trying to force upon a child who is not old enough

Causes of Behavior Problems

to understand? The answer to the first question usually reveals that parents are hostile to a child because he reminds them of someone whom they dislike. The second question is answered by finding out what qualities the parents consider most important in their children. They usually head the list with such characteristics as obedience, truthfulness, honesty, nobility, cleanliness, good manners, respect, and consideration for others. No two parents agree absolutely on the order of importance, which suggests that none of these characteristics is very vital. When parents are pressed for their reasons for considering a certain attribute important, they usually cite some unpleasant experience in their own childhood that fixed the idea in their minds. Unless these prejudices are analyzed for the parents, they will be unable to understand that all normal children disobey, lie, steal, swear, become noisy, break windows, track mud into the house, and often make themselves very annoying to adults.

Further dangers lurk in the tendency of a parent to relive his own childhood in his children, to try to force upon them a compensation for his own shortcomings and disappointments. The case of sixteen-year-old Tom illustrates this situation. His grandfather was a very successful businessman and an extremely strict parent, who, when his son (Tom's father) wanted to study medicine opposed the idea and forced the boy to go into business with him. The son, in turn, was very strict with his children and tried to compensate for his own thwarted desire by insisting upon Tom's studying medicine, although Tom had no interest in the subject. Young Tom was very resentful and, in spite of (rather than because of) the way his father treated him,

A Psychology of Growth .

asserted that when he had children he would "knock them around aplenty" if they didn't mind.

This type of behavior is very common. A mother whose husband wet the bed until he was an adult worried greatly over the possibility that her child would do the same thing; as a result of that anxiety, he did become a bed wetter. Another woman, who got into great difficulty because of harmless sex play as a child, later kept a morbid watch over her children and was both disturbed and disturbing when she saw actions of which she did not approve. Most fathers overrate obedience. Those who were brought up very strictly and received much corporal punishment usually vent their old resentments on their children and demand implicit obedience from them. Similarly, the "tough" businessman who frightens all his employees, because he himself is frightened, insists on efficiency in the home and tries to apply his rough-shod business methods to the management of his children.

There is likely to be trouble also when parents do not agree about their children. In fact, it disturbs a child more to have his parents disagree about discipline and methods of bringing up the family than it does to have them follow the poorer of the two methods that they advocate. If, for example, the father believes in strict discipline and the mother is inclined toward leniency, it is better for them both to be either strict or lenient than to pursue the two methods at once, because this practice leads to confusion in the child's mind. After all, the important consideration is neither strictness nor leniency but the necessity for making the child feel that he is all right and that his parents want him.

Causes of Behavior Problems

Parents also err by humiliating a child in the presence of others. They may do this consciously or thoughtlessly, but the results are the same and cannot be good. For example, a very active three-and-a-half-year-old boy was playing in the room where his father, presumably a well-educated man, was talking to a guest. Some of the child's antics were normal activity, some were a dramatization for the audience. "John," said the father, "I think you are silly. Stop doing that." He repeated this formula six or seven times within an hour. Each time, the boy appeared to be embarrassed and was quiet for a few minutes; then he would begin the same behavior again. Criticism of children in another person's presence is never indicated.

The precept "Do as I say and not as I do" is equally harmful. Parents should never expect good conduct to result from the hypocritical practice of forcing upon children a code that they permit themselves to violate. For example, many children whom the parents reprove for lying know very well that their mother and father lie and laugh about it. One nine-year-old boy reported with much feeling, "If I swear, my dad slaps me in the mouth, but he swears all the time." Uncertainty and resentment are inevitable consequences of such a situation.

Other behavior problems are likely to be in the making when parents proclaim that they live only for their children. It is well to be suspicious of those mothers and fathers who constantly complain that they "work their fingers to the bone" for their children. They are often persons who are desperate for approval and are disappointed when their unreasonable labors do not evoke from their children the admiration and consideration that they desire. These

A Psychology of Growth

parents are unwilling to permit their children to grow up and learn to take care of themselves, because keeping them dependent gives the mother or the father a false sense of importance.

In analyzing the frustrations of children that are caused by these various factors one should remember that they are induced less by resentments toward the youngsters than by lack of adequate praise and expressions of satisfaction with them. Many different elements may be at the root of the trouble but, all in all, the problem child is one who shows signs of distorted mental growth.

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Behavior Problems

Enuresis is a symptom and indicates that growing up has been made too difficult. Enuresis is usually but one of many complaints. Fear and resentment are the two main causes, with emotional immaturity as a contributing factor. Children stop soiling and wetting when they are ready.

Eating is an important emotional outlet, having physiological and emotional attributes. All well children eat a sufficient amount of food for health and gain. Poor appetites in well children are due to coercion.

Stuttering indicates that the individual is under a great deal of tension in his own mind.

Spoiled children are mentally ill individuals. The condition is caused by overprotection or rejection.

Stealing may be the normal behavior of well children or the compulsive behavior of those who are mentally ill.

ENURESIS

ENURESIS, or urinary incontinence, may have organic causes, such as defects of the genitourinary organs and *spina bifida*, or cord lesions resulting from trauma, tumor, or infection. We are concerned here, however, with that large group of children whose urinary incontinence has no organic cause.

Enuresis is about three times as common among boys as

A Psychology of Growth

among girls. In spite of the fact that there may be no organic basis for the condition, the children who suffer from it often present striking physical similarities. About 75 per cent of the boys are small and rather weak and have effeminate faces. The girls who wet the bed, on the other hand, are more often of a quite opposite type. They are likely to be large, clumsy, and unattractive.

Normally, children assume the responsibility for toilet habits during the day when they are twelve to eighteen months of age and, during the night, by the time that they are two or three years old. Many children, however, continue to wet the bed beyond these periods or, after having stopped, begin again. This habit often becomes a seriously disturbing element in the family life, not only because of the odors and the additional work that it occasions but because the mother does not have a normal mental attitude toward her children when one of the older ones wets the bed.

Parents, therefore, frequently take children to a physician because of enuresis. A careful history is likely to reveal that this is only one of many complaints in the child, such as thumb sucking, nail biting, excessive crying, bad eating habits, poor progress in school, and inability to get along with other children. When it is the sole complaint, it is probably due to organic lesion; when it is one of many problems, it can usually be traced to an emotional disturbance.

If a child who once assumed responsibility for toilet habits later reverts to bed wetting, it is probable that the enuresis followed some unhappy or disturbing experience. In many of the cases that have been studied, the enuresis began when one of the parents, most frequently the mother,

became ill or was obliged to be away from the family, or when the patient had had trouble in school and elsewhere outside the home. When enuresis is regarded from the point of view of the child's emotions, it appears that fear and resentment are important elements.

Possibly the child wets the bed during very frightening dreams. Since fear can cause an individual to lose sphincter control even while he is awake, it is not surprising that a child who dreams he is being murdered can be sufficiently frightened to wet himself at night. This stimulus operates the more powerfully because children do not distinguish well between imagination and reality and a large percentage of them believe that dreams come true. In any case, children who wet the bed are almost invariably fearful, and their dreams concern terrifying encounters with robbers, kidnapers, and ghosts. In some cases, however, emotional immaturity is the predominant factor.

George, who had nocturnal enuresis off and on up to the age of seven, was an extremely apprehensive child. Two frightening experiences in his third year had upset him rather badly and caused him to cry at night and object to sleeping alone. Later, when he entered school, he was inattentive and unwilling to work, although he was sufficiently intelligent. Physically George was slender and small for his age, attractive, and very much like his mother. This resemblance appeared also in his mental and emotional attributes. She, too, was a very fearful individual, whose condition was the result of an unhappy childhood, and she was still dominated by her mother. During George's sickly infancy, she had despaired of rearing him and had transmitted her unhealthy attitude to the child. Accus-

A Psychology of Growth

tomed to much attention, he became furious when his younger sister received any notice.

George was a very clean, quiet child, who did not adjust well to other boys and their rough play. He played with girls by preference and said he wished that he had been born a girl, because boys did bad things. In his dreams he was beaten by a witch, who resembled his mother. His daydreams took him back to infancy and he derived satisfaction from imagining himself in a crib with his mother bending over him, changing his diaper and giving him medicine.

This little boy was taken to a physician because of enuresis, but quite obviously the trouble was only a symptom of a complex mental and emotional problem.

The other personality disorder frequently observed in children subject to enuresis is resentment. In the minds of both children and adults, excretory functions appear to be closely allied to expressions of this emotion, as has been illustrated many times by actual cases. One such case is that of one eight-year-old girl whose father, becoming infuriated when he found she had taken two cookies instead of one, upbraided her for deceit and lying, spanked her, and sent her to bed. After that experience, she began to wet the bed.

A younger child, Betty, was taken to a physician because of nocturnal enuresis. The condition had been present for four years, although prior to its onset the little girl had been dry at night for almost a year. At the time of the examination, she was six and a half. Her younger sister was then four years old; that is, her age coincided with the period of Betty's enuresis.

Every time that Betty went to the physician's office, he asked her what she would like to do. One day she answered that she wanted to draw. She was given paper and pencil and proceeded to draw pictures of a very ugly man and woman, whom she labeled "Father" and "Mother," a small girl who was designated as baby, and a larger child whom she called "the girl." When asked what she wanted this family to do, she replied that the baby would turn into a witch, who would then change the mother into a witch; after that the mother-witch would transform the father and "the girl" into witches. In reply to questions about the attitude of the girl toward the baby, Betty dilated on the hatred that the older child felt for the younger and concluded by telling how "the girl" threw the baby out into the yard and killed her. Further questioning elicited the information that "the girl" had always hated her sister; she had hated the infant the moment she saw her and this feeling had increased when she saw the mother nursing her. At that time "the girl" hated the mother, too, and wished that they would both go away. When the physician asked Betty how "the girl" in this play felt about herself, she answered that she knew herself to be very bad because she hated the mother and the baby and killed the latter. Betty added that, because of "the girl's" wickedness, mother chased her and beat her.

While she thus played the part of "the girl," Betty expressed her jealousy and her fear in many ways. At the end of three-quarters of an hour she said, "This is the end of the story. The play is over." In her case, hatred of her sister was bound up with fears about herself because she harbored this hatred.

A Psychology of Growth

At the age of ten, John was still wetting the bed. Inquiry showed that his parents had wanted him and had given him good care until he was two and a half years old. At that time, however, his mother began to work outside the home and left little John in the care of his grandmother, who never liked the child. Probably because it was she who was in charge at the time when John should normally have established good toilet habits, he failed to do so, although he had previously assumed all responsibilities appropriate to his age. Certainly the environmental conditions were not conducive to normal growth. Another factor in the case was the relationship between the boy and his **sister**, who was six years older. After the mother had gone to work, the sister often took care of little John and played that he was her baby. Up to the time when he was examined at the age of ten, he still liked to have his sister rock him and to imagine that she was nursing him. In his daydreams he was a baby about two years old, he said. He expressed few fears and resentments. They must have been present when he was placed in his grandmother's care, but they were deeply buried in his unconscious mind. At the time of his examination, his attitude was one of indecision. On the one hand, he wanted to grow up and, on the other hand, he enjoyed remaining an infant.

This case illustrates delayed emotional growth, with the patient remaining at that level at which he received sufficient satisfaction. It contrasts with those cases in which the patients first reach a higher level of growth and then, when problems become too complex for them, return to a more immature stage. These two phenomena occur at all ages and enuresis is not the only symptom.

While circumstances vary widely in the many cases studied, they present a uniform pattern of environmental and innate difficulties. In every case, it is evident that the child is having a hard time growing up; the boy, perhaps, because his small stature makes him the object of ridicule; the girl, because of domestic maladjustments. Under such circumstances, the individual does not mature emotionally but throws off responsibility and returns to a more satisfying emotional level. The resultant enuresis, then, is a continuation of or a return to an infantile habit.

So many therapeutic procedures have been tried in the treatment of this condition that the history of enuresis reads like the history of therapeutics itself. Practically every office therapeutic procedure has been employed in an effort to prevent bed wetting, and many other remedies have been contributed by the laity. Whenever, in medicine, apparent beneficial results are obtained by so many divergent methods, there can be only one agent common to all. That agent is suggestion.

The fact is that children assume responsibility for toilet habits when they are physically and emotionally ready. They stop wetting the bed when they want to do so; that is, when they have sufficient incentive. The child wishes to please adults and to gain the personal satisfaction of accomplishment and will normally overcome his enuresis for these reasons. If he fails to do so it is because growing up is too difficult for him. The treatment, therefore, consists primarily of an effort to learn what personal or environmental factor causes him to persist in or revert to infantile behavior. Enuresis that is caused by insecurities and deep-seated fears and resentments requires long psychiatric care. On the

A Psychology of Growth

other hand, that which is traced to jealousies, difficulties in school, inability to get along with other children, too much forceful discipline, and other environmental conditions, can be cured by improving the external situation.

In working directly with the child, praise is very helpful, also tangible signs of approbation, such as gold-star charts and similar devices. It is possible, also, to teach the child that dreams are not true, that he can tell himself in his sleep that he is only dreaming, and that therefore he has no need to be afraid. He can learn also that it is possible for him to wake himself at night, if he wants to end a bad dream or if he feels like urinating. In other words, he can stop wetting the bed if he chooses, and he can be made aware of that fact.

Many children who really want to stop fail to make the effort because they are convinced that the condition is due to weak kidneys or bladder or to some other organic cause. Any procedure, such as the use of medicine, restriction of fluids, and the like, that is based on these assumptions is not good medical practice, because it not only fails to teach the child responsibility for his actions and to eliminate his personality difficulty but also confirms his belief that there is something wrong with him organically, when actually there is no evidence of disease. Such an attitude is a marked characteristic of the neurotic individual.

Treatment should be directed to the whole child rather than to the symptom itself. Enuresis is analogous to a fever. The physician is no longer concerned with the fever as such but, recognizing that it is one important symptom, he looks for and endeavors to eliminate the cause. The treatment of enuresis should include (1) making the child

responsible for himself, (2) psychotherapy, and (3) adjustment of environmental difficulties.

Fecal incontinence, a rarer and more serious condition, is like enuresis, in that it is very undesirable behavior without organic cause. The psychological causes are similar, but fecal incontinence is nearly always an expression of intense resentment. It occurs almost entirely during the day, rather than in the night as is most frequently the case in enuresis.

The case of Edward illustrates these points. He was a very intelligent, physically well, good-looking ten-year-old who had been soiling himself from two to twelve times a week since he was three years of age. When he was taken to the doctor for examination because of his incontinence, he readily became very talkative. Before the end of an hour, he was freely expressing his hatred of his parents and admitting that he had daydreams in which he hoped they would die. At night he frequently dreamed that his parents were killed or that they were killing him. Questioning brought out many resentments caused by his parents' attitude toward him. He complained that, although his father swore, he would slap the boy's mouth if he uttered an improper word. Edward also described punishment that he had received for bad manners, tardiness, talking back, low grades in school, and other unimportant matters. Presumably, Edward's parents wanted a child, and apparently they had given him fairly adequate care, with the help of nurses, during the first few years of his life. By the time he was about three, however, they began to be disturbed by their own fears that the child would not be accepted socially because of racial and other characteristics. For that reason,

A Psychology of Growth

they tried to impose impossibly high standards of behavior upon him. Unable to meet their requirements, he responded with resentment and consequent incontinence.

Treatment of such a child should be designed to build up his self-confidence and sense of security and to resolve his mental conflicts. To that end, it is necessary to convince the parents also that there is nothing wrong with the child and that, if he cannot measure up to their standards, it is only because those standards are too high for any child of Edward's age. The parents must learn that they can accomplish more with praise than with blame.

FOOD PROBLEMS

Two of the health problems which cause the greatest concern today are related to food. These are anorexia in young children and obesity in older ones and adults. This is not surprising in view of the fact that the acquisition of food is among the primary satisfactions of the baby and has been described as one of the three basic needs of men, the others being sleep and warmth. Eating and drinking are among man's foremost emotional outlets and are a great source of satisfaction. He takes food not only because he is hungry but also for the emotional gratification derived from eating. On the other hand, the acquisition of food is one of the most complicated of physiological processes and is intimately associated with emotional growth. Any disturbance of the process is consequently a matter of decided importance.

Under normal circumstances, all well children eat a sufficient quantity of food for health and growth. It is necessary only to offer them proper food and to allow them

to eat as much as they like. Some children require far greater amounts of food than others and in this matter each individual is his own expert, who knows better than anyone else how much he should have. Even in any one individual the appetite fluctuates to a very considerable extent. It frequently happens that a child will eat a large amount of food for a time and then a very small quantity. Sometimes he goes on a food jag. That, too, is entirely normal.

None of the variations would be a matter of any moment if parents did not believe that they were. Our forefathers, who were not enlightened by radio commercials and admonitory magazine and newspaper advertising, took it for granted that Johnny would eat when he needed food just as he breathed when he needed oxygen—and he did. Unfortunately, parents of today have become so acutely conscious of the importance of food that they often make it difficult for Johnny to find satisfaction in eating. They have heard that poor appetite is a sign of serious illness, that a child should be up to a given weight, that he should have so many vitamins and so many minerals, not too much starch but plenty of this brand of evaporated milk and that brand of canned vegetables. He must have some of these foods once a day, some twice, and some three times or he will not grow up to be a champion. The constant bombardment of this sort of propaganda is not only confusing but, in the case of apprehensive parents, extremely unsettling. Although their idea of the kind and amount of food needed by their children changes from week to week, they become seriously disturbed if the youngsters do not accept the diet currently advocated by some supposed authority. This anxiety, which is more communicable than measles,

*A Psychology of Growth**

is soon transmitted to the child, often with more or less disastrous results.

Since eating is one of the most important primary pleasures, any disturbance of that emotional process naturally distorts mental growth. It is significant that maladjusted or neurotic adults usually exhibit food idiosyncracies. They are convinced that something is the matter with them because their tastes and habits differ from the model presented by a certain diet list or because they are above or below the weight designated as normal on some chart that they have consulted. Lowell S. Selling, in a study of 100 draft-board rejectees and 100 traffic offenders, other law violators, and domestic-relation cases, found that men's tastes and reactions to food were a clear reflection of their mental lives. Vitamin deficiencies, for example, appeared to be caused not by the inability to get adequate food but by the same personality factors that caused draft-board rejections and legal offenses. Persons of low mentality who violated traffic regulations because of inability to tell right from wrong made comparable mistakes in the matter of eating. Among the rejectees, most of the neurotics had food eccentricities that appeared to be connected with their neuroses. None of the rejectees had a diagnosable physiological ailment, but all complained of indeterminate disturbances, which they attributed to eating certain kinds or combinations of food.

A child who is in contact with such an individual frequently becomes alarmed about his own preferences in food. If the adult extends the anxiety that he feels about himself to include the child, the effect is likely to be serious. The child not only begins to fear that he is abnormal, but he

uses food as the means of obtaining additional attention or as a method of fighting back when difficulties become too great. Refusal to eat becomes a valuable weapon with which he counters parental opposition to some project or habit and endeavors to get even with his elders. This may begin at a very early age; witness a smart three-year-old girl who one day sat with her chin in her hand, looking very forlorn, in imitation of her mother. "Mommy worries," Frances said, "when I don't eat."

In a normal household, a food problem often has its origin in sickness. Poor appetite is usually the first sign of illness shown by a child. Parents understand that, but they do not know, or, in their anxiety, seldom remember the converse, that convalescence is marked by the return of appetite. If they restrain their impatience to have the child eat until he is ready to do so, no harm will be done. By urging him to eat before he has the desire for food, they accomplish no immediate good and may do much ultimate harm.

Frances, mentioned above, further dramatized the problem. After eating breakfast at half past seven, she played out of doors until dinnertime, at one o'clock. She had a slight cold and, by the time she came to the table, she was extremely tired. Although she ate very little dinner, she asked for cake for dessert. She ate only a few bits of cake, however, and then asked for pie. After she was given the pie, which she did not eat, she demanded cookies and candy. When they were denied her, she cried bitterly and, as her mother carried her from the room, she said tearfully, "I want candy, I want cookies, I want jello, I want—!" What she wanted was someone to rock her to sleep, but since she

A Psychology of Growth

did not realize what her desire was, she expressed her unsatisfied need in the form of a demand for various foods.

A doctor, when a mother calls him to say that her child has suddenly refused to eat, is almost certain that the youngster has a mild throat infection or is developing some other illness. This condition often continues for several days, during which the child's appetite remains poor and he may become pale and lose some weight. Alarmed by this situation, the parents may try to force the child to eat and he then reacts in the normal way; that is, forced feeding makes food distasteful to him; if it is carried too far, he vomits. In a few days, when he recovers from his infection, his appetite should normally return but by that time food has become so repulsive to him that he is unable to eat, even though he may be hungry. Therein lies a common battle between parents and their children.

"My child won't eat" is today the reason most frequently given by parents for consulting physicians and nurses. Yet food problems are a new development. Until about forty years ago there was no such thing as anorexia except during illness. The problem is a product of the rapid advance in our knowledge of nutrition, unaccompanied by sufficient judgment to apply our new-found information wisely. It is one thing to sit down and figure out the number of calories that we think a child needs and decide upon the kinds of food that should supply them, and quite another thing to require the child to accept the concoctions we have selected and eat the quantity we have decreed. This is impossible, even in the case of a newborn baby; as the child grows older, we fall farther and farther from the mark. We know the various essential food elements and the approximate

amounts of each that a child requires at any given age; he alone knows what he wants in a given day. Probably dietitians have greatly hampered child feeding by their great skill in making all kinds of undesirable food acceptable to the palate. Nevertheless, when we give children plain simple foods—meat, potatoes, vegetables, bread, butter, milk, and fruits—and leave them alone they eat a sufficient variety and sufficient quantities to meet any nutritional requirements. That is why our ancestors, without benefit of nutritionists, avoided the food problems that beset their supposedly well-informed descendants.

STUTTERING OR STAMMERING

Stuttering is one of the most disturbing handicaps that is met in medicine. Although it has been the subject of much study and research, theories regarding stuttering remain protean. In a very excellent book, Hahn¹ summarizes the theories of some twenty-five or thirty American and European authorities on the subject of stuttering, showing that no two of these investigators agree as to the exact cause of the condition. In general, however, they regard stuttering as a neurosis caused by a persistence of infantile frustrations into later life, a psychological inhibition that has an emotional basis, or the result of a combined physiological and functional defect. All the authorities agree that as a stammerer approaches adolescence he becomes greatly disturbed about his handicap and develops serious personality difficulties.

Stammering usually begins at the discipline age (two or three years), upon entering school, or at adolescence. The child who begins to stammer at adolescence usually gives a

A Psychology of Growth

history of difficulties earlier in life. It is known that stammering is more common in boys than in girls and that most persistent stammerers are boys, but we have no satisfactory explanation for these facts.

From a clinical standpoint, we see children begin to stammer when they are placed under excessive tension in the home. That is probably the reason why many children who talk correctly when they first learn to speak become stammerers at the discipline age. The onset often occurs at the end of infancy, when the growing child becomes very active and the mother tries to keep him quiet. It may coincide with the visits of grandparents or other relatives who exercise too much authority over the youngster, or it may appear when the parents become anxious and try to eliminate some habit that they consider undesirable; again, it may begin when the little boy or girl becomes very frightened for any cause and cannot throw off this anxiety. The following cases are illustrative.

Robert began to stammer when he was three years old. His was an acute condition, which came on while his father was away on a business trip and the mother was living alone with the little boy and his baby sister. The mother lacked self-confidence and had difficulty in managing the home. Robert was an aggressive, active youngster whom the mother felt she had to watch closely and, at times, discipline severely because she was afraid of what her friends would think of her. A few nights before the onset of the stammering, this mother went on an errand and asked a neighbor to watch the house, from her own home. After a short time the neighbor heard Robert screaming. He had

awakened and become very frightened when he found that his mother was not there. For several nights he cried out in his sleep and, during the day, came in from play at frequent intervals to make sure that his mother was at home. After the parents revised their method of handling Robert and devoted a good deal of time to him every day, he stopped stammering in a few weeks.

Jerry began to stammer a few weeks after he entered first grade in school. At that time he did not play well with other children. His kindergarten teacher described him as a high-strung, sensitive boy who cried easily. At home also he cried excessively and fought more than the average child would with a younger brother. According to his mother, he had always been thin and did not eat as well as she thought he should. He had a tendency to left-handedness and had stammered slightly when he was about three years old. Altogether he was a sensitive, insecure little boy who had never made a good adjustment. His schoolteacher was very strict and emphasized promptness, gentlemanliness, and cooperation. Under all these circumstances the first-grade program was too difficult for him and the confusion over handedness was an additional factor in the development of his stammering.

In order to help him overcome this handicap, he was placed in another first-grade room where the teacher was less tense and understood the nature of his problem. His parents made an effort to build up his self-confidence and an excellent playground instructor helped him to learn how to get along with other children. His fears of being hurt and not being liked were discussed with him. In six or

A Psychology of Growth

eight months his stammering disappeared, but unless a careful program is continued for many years, his difficulties may return.

In origin, stammering is not unlike other anxiety manifestations. For example, many an individual who can walk back and forth easily on an eight-inch plank that is placed on the ground would fall off if he attempted to walk the same plank suspended forty feet in the air. Similarly, the stammerer has been compared to the child who is proud of a new pair of shoes and is so anxious to keep them in good condition that he inevitably stumbles and skins the toe. In other words, a child's fear that he cannot perform a given act that involves motor coordination may make it very difficult for him to perform that act.

Studies of schools have shown that, over a period of twenty years, ten times as many stammerers develop in one first-grade room than in another. The room that has the large number of stammerers is the one where the teacher is tense and frightens her pupils. It appears, therefore, that stammering is related to definite fears. Although these fears inhibit thinking, nevertheless, the child attempts to speak. While he is waiting for his thinking to clear up so that he can express himself, his speech becomes a repetition of one sound or a return to many sounds and movements that he made as an infant.

In stammering there is also a persistence of sucking or infantile chewing, swallowing, and breathing actions. For a detailed description of this approach to stammering, read "For Stutterers," by Smiley Blanton and Margaret Gray Blanton.² One twelve-year-old boy described the con-

dition well by saying that when he stammered he went just like a baby sheep, baa-baa-baa. There is much about a stammerer's general behavior that is infantile, and he does not mature emotionally.

Many children begin to stammer when they are two or three years old, but in most cases the condition clears up in a few weeks without any special treatment. It is good practice, therefore, to make no effort to correct a child, but rather to wait and see whether or not he will improve spontaneously. Parents should be told not to try to silence a child who is stammering and not to ask him to repeat what he has said, as stammerers can always repeat correctly. Neither should they attempt to force a child to talk more slowly, or offer any other suggestions. The best thing they can do is to ignore the youngster's difficulty entirely. In this way, they can possibly relieve the general tension under which the child has been living and that may be sufficient to end the stammering. It has been found also that rest in bed and sedation will cause the condition to disappear temporarily. In order to effect a cure, however, the sources of anxiety should be investigated and eliminated.

In the case of a young child, stammering that does not disappear within four to six weeks requires a more careful investigation. This should be directed (1) toward discovering the superficial conditions in the home that have placed the youngster under tension, and (2) toward remedying these conditions. If the stammering still persists after these measures have been taken, it may be regarded as a psychiatric problem. Treatment of the child then makes it necessary to determine what anxieties in the minds of the

A Psychology of Growth

patient or the parents are causing the emotional disturbance. Stammering in a six-year-old or an adolescent is serious and calls for psychiatric help.

SPOILED CHILDREN

The term "spoiled child," which has no scientific meaning, has come to have little significance of any kind, owing to the fact that it is so often applied to the youngster who exhibits any behavior that does not meet with adult approval. Because this designation is in such common usage, however, it might be well to look at the typical "spoiled child" and try to explain the reason for his behavior.

Generally he is that tyrannical youngster who, in order to gain his own ends or to annoy his parents, teachers, and others, deliberately does things that he knows are objectionable. A child of this type makes immoderate demands, which he himself realizes are impossible of fulfillment. He is negativistic, disrespectful, unreasonable, and usually destructive. He does not respond to ordinary methods of management, either in the form of praise or in that of discipline. Although he is thoroughly disagreeable to live with, objective observation shows that he is not a bad child but one who is very unhappy. His behavior is seriously abnormal. When small children—or even grown ones, for that matter—defy their parents, they are acting in desperation.

"Spoiled children" fall into two categories—those who feel that they are unwanted or that they do not meet with approval, and those who are overprotected. Two typical cases illustrate the results of these conditions.

Eight-year-old Arthur was a "spoiled brat." His teach-

ers said so. In the classroom he whispered incessantly, jabbed other children with pencils, made noises, refused to "get down to business," and was disturbing in every way. What the teacher minded most was the broad grin that he always wore when she corrected him. This infuriated her so greatly that she spent a considerable part of her time watching the boy and trying various methods of humiliating him and "taking the cockiness out of him." On the playground he fought with other children and made himself a nuisance in many ways.

At home it was the same. Although the parents had tried many different disciplinary measures, he persisted in teasing his sister and brother, taking their toys, and fighting with them. When there was company in the house, he never failed to "show off." Most significantly, he had nightmares in which he was being pursued by a witch or killed by giants, one of whom he identified as his own father. Obviously he was a very insecure little boy, who harbored the painful idea that he was bad and of no account.

A careful case history revealed that the boy belonged to the type that is active from the moment of birth. As a baby he had colic and kept his parents up many nights. In their view, he was always a difficult child, becoming more difficult as he grew older. When he learned how to walk and climb, he climbed and walked over the best furniture and into forbidden places in spite of all admonitions. This behavior distressed the parents all the more because it contrasted sharply with the model conduct of an older sister. Then, before Arthur was past his own infancy, his mother gave birth to another boy, whom she described as the most precious baby in the world. At the time when Arthur was

A Psychology of Growth

brought in for examination, the mother frankly admitted that she did not like him as much as she did the other children. The father, a successful businessman, was one of those aggressive, efficient individuals who, because they are basically frightened themselves, try to control everyone else by fear. He asserted that he could never understand Arthur but believed that the mother had spoiled him.

All the facts showed that Arthur was a rejected child, who was neither understood nor accepted by his parents. Because it was his nature to fight back when insulted, he became a troublesome little boy. Obviously, in order to cure the boy, it was necessary to treat the parents and teachers. They had to understand that his behavior was the result of his feeling that he did not enjoy their approval and his conviction that he was not liked. Since he never received favorable attention, he felt compelled to do things that would bring unfavorable notice and, until he could feel that he was wanted and liked, no amount of disciplinary action would correct his behavior.

After we have studied the attitudes of Arthur's parents and teachers, we can readily see the reasons for his behavior. A child, however, does not understand them and could not alter conditions if he did. Adults who say that a child does things to get attention often imply that his behavior is inexcusable and expect him to change merely by telling him so, usually in a scornful manner. Granted that the child misbehaves to gain attention, he still cannot help acting in this way. Saying that he does things for attention is like saying that he has a fever. In either case, the patient is ill and, if we are to help him get well, we must determine the cause and eradicate it. We must remember that

children, like adults, do the best they can. When we know all the factors that are involved, we can see that the behavior of the "spoiled brat" is as logical as the adult acts of wisdom about which we like to boast. When his conduct is unsatisfactory, it is necessary to determine why he is acting in this way and to improve his environmental conditions.

Jimmy was another "spoiled child." At the age of nine and a half, he resorted to violent temper tantrums as a means of getting his own way. Frequently he would throw himself on the floor and beat his head until his parents gave in to him. When he came home from school, he would demand that his mother stop whatever she was doing in order to play with him and, if she refused, he would push and slap her until she acceded to his demands. His school-mates disliked him and, although he had a high I.Q., he did not get along well in school because he refused to do the work that his teacher assigned.

Unlike the boy previously studied, Jimmy was an only child. Although the parents were eager to have children, they had been married six years before Jimmy was born. He was received, therefore, both with delight and with apprehension that caused the parents to watch over him constantly. The overzealous mother fed and dressed him until he was five years old and gave him everything that he wanted. As a result, he continued to use an infantile type of speech, to suck his thumb, and to wet the bed. At the age of nine, he took little responsibility for himself.

Here, then, was an uncertain, dissatisfied boy, who tried to relieve his unhappiness by making demands. Because he had not been permitted to grow up and do the things

A Psychology of Growth

of which he was capable, his behavior remained infantile, and he used temper tantrums to force his parents to do what he asked.

Children whose objectionable behavior causes people to call them spoiled may be either those who are used as an emotional outlet for their parents and not allowed to grow up, or those who are rejected and made to feel that they do not meet with approval. They are emotionally immature, frightened, and resentful. Their mental growth is altered, just as another child's bones are bent as the result of rickets and malnutrition. They should be regarded as children who are unable to grow emotionally, and it is necessary to find out how and why their growth has been retarded.

Not all psychiatrists agree about the causes that produce spoiled children, especially children like Jimmy. He is an example of maternal, really parental, overprotection. Levy³ holds the opinion that the behavior of such children is always due to unconscious rejection. Other psychiatrists believe that some of these children are hated, while some are affected by the insecurity and overanxiety of parents. Clearly, the first of the two cases is an example of maternal rejection. In the second, the child was wanted but the parents, especially the mother, were very insecure. She was always afraid that something would happen to her child and got the greatest satisfaction from giving him more affection and care than he needed or wanted. As a result, this boy remained infantile.

STEALING

Among the many problems about which parents consult physicians and nurses is that which is commonly called

disobedience. From the point of view of the parent, this is a serious offense; viewed objectively, it is the result of the parents' attempts to force their children to meet standards that are often unreasonable or to other frustrations in the growing child. This applies as much to stealing as to other lapses that parents view with less consternation. It is necessary, therefore, to distinguish between those few cases in which stealing is due to real mental illness and the great majority, where the problem is simply one of parental education.

Authorities on the subject of behavior know that it is as natural for children to lie, swear, and steal as it is for them to track mud into the house, wipe their dirty hands on the towel, make noise, break a window now and then, and disturb the neighbors. This is particularly true of the preadolescent group. These children are enjoying their last fling before being engulfed by the restrictions of adult society. It is a statistical fact, borne out by psychiatric studies, that this behavior is not abnormal and does not lead to difficulties in adult life. The fact is that those children who do none of these things are the ones who develop mental ill-health when they grow up.

There is a type of stealing, however, that is pathological. This is behavior of a compulsive nature. Children exhibit it by breaking loose and stealing articles that they neither want nor need. They make little or no effort to conceal what they have done and feel better after they have been punished.

A good illustration of this type of behavior is found in the case of nine-and-a-half-year-old Frederick. This child, the son of a high-school teacher and an efficiency expert, was brought up by a grandmother, who prided herself on her

A Psychology of Growth

competence and her determination to make the boy understand that when she issued an order he was to carry it out to the letter. From her point of view, he was, most of the time, an exemplary little boy, obedient, clean, quiet, and polite. Off and on, however, he wet the bed and occasionally went through periods when he set fires and, in his mother's words, "stole everything he could get his hands on."

Frederick's difficulties bring to mind a statement made by Dr. A. A. Brill. "It is not easy to be a civilized person," Dr. Brill said, "to wash your hands and comb your hair and act at all times like a lady or gentleman. If you continue to behave this way for a very long time you are likely to burst, in order to ease the tension. For that reason, human beings have made certain by-passes for themselves, in order to provide some sort of outlet for their pent-up feelings." The by-passes that Brill was discussing were motion pictures, prize fights, and other forms of amusement. Frederick, too, needed to find some outlet or he must burst. It was impossible for him to behave like a nice old lady for 365 days a year. When the tension became too great, he relieved it by stealing and setting fires, instead of employing any of the outlets sanctioned by society.

Work with the boy revealed, naturally, that he was convinced that he was bad and worthless and that nobody liked him. He had intense resentments, particularly against his grandmother and his mother, and because of his feeling he was oppressed by a sense of great guilt. Apparently he made an enormous effort, most of the time, to win his elders' approval and attention; but being an active, alert, intelligent, aggressive boy, he could not always

live up to their foolish expectations and every so often he broke loose.

One frequent cause of compulsive stealing is an intense sense of guilt that comes from indulging in homosexual activities. This applies almost exclusively to boys and appears especially in the late preadolescent or early adolescent stage of growth. Such a boy is so disturbed by the bad things he has been doing that he wants to be punished. Rather than admit the real cause for his sense of guilt, however, he takes to stealing, which, in comparison, appears to be a respectable form of misconduct. Letting people know that he has been stealing and taking his punishment for being bad relieves his guilty feeling and, at the same time, covers up what he considers his really serious sin.

Compulsive behavior of this kind is a sign of mental illness. It is important to recognize this fact and the corollary, that it can never be corrected by corporal punishment, or, for that matter, any kind of punishment. It is a mistake to place the patient in a military or a boarding school, because that step will not correct the condition that is responsible for his compulsive behavior. This type of behavior should be considered a symptom, such as fever or labored breathing or any other indication of an organic illness.

Even when a child's behavior is so objectionable that we feel we cannot tolerate it, we must realize that it is the inevitable outcome of his experience. The misconduct of the so-called mean kid is just as logical as the considered acts of wise men. Our inability to understand the reasons for it is an acknowledgment of our lack of wisdom or information and does not indicate that the behavior is unreasonable.

A Psychology of Growth

able. We must recognize that undesirable behavior is the outcome of a person's attempt (whether he is a child or an adult) to find an outlet for his unsolved problems and to gain satisfaction or expression of his growth needs. In all probability, he is motivated by fears, resentments, and a sense of guilt, on the one hand, and on the other, by the need for approval. It is fortunate that he is aggressively trying to find a solution. This makes the prognosis better than it would be if he became a shut-in, "broken" individual.

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Preadolescence

For boys this is the almighty age of growth. Girls mature more rapidly and have more grown-up interests. Serious anxiety states appear at this age. They occur in rejected children (more often girls) who have had impossible standards of behavior imposed upon them during infancy and childhood. Anorexia nervosa is a serious nutritional disturbance in girls who refuse to eat a sufficient amount of food. The condition is emotional in nature and is caused by fears of growing up.

PREADOLESCENCE is the period between childhood and puberty. Although the growth patterns are the same in all children, there is considerable variation in the chronological ages of boys and girls in this period of development. Sex hormones are secreted and found in the urine of some girls at the age of four and a half years, while in others this phenomenon does not begin until they are seven or eight. On the average, however, preadolescence extends from the age of eight to the age of twelve. Younger boys and girls play well together, but during preadolescence an antagonism develops between the sexes. Often there is so much open hostility that boys and girls not only refuse to play together but often fight one another.

A Psychology of Growth

For boys this is the almighty age. They are absorbed in their new growth and have a feeling of manliness; but not being sure of themselves, they have to prove their strength and independence to themselves and to everyone with whom they are associated. They form groups, reject adult ideas, and say, "I don't care." They have unbounded energy, which they expend mainly in physical pursuits, such as all forms of athletics, or building club houses and tunnels. They would like to become airplane pilots. The adventures of Tom Sawyer and Huckleberry Finn and Superman thrill them. They play war games, occasionally like to make other children unhappy, and sometimes carry their domination to the point of sadism. During this period, they appraise their physical development and compare themselves with others. Their own shortcomings give them great concern and they often become frightened by the thought that they are abnormal.

Preadolescent boys think that girls are stupid and silly and are often contemptuous of them. "I don't see how you can be so dumb," one eleven-year-old boy said to the girl whom he later married. The girl was crushed, but afterward she confessed that she had thought the boy was wonderful in spite of what he had said.

Schools find preadolescence a difficult age. The boys show off, feign indifference, and in general, either show contempt for a woman teacher or fall in love with her. Some progressive schools put boys and girls in different classes, in the belief that the separation makes administration easier and more successful.

During this growth period, a boy first attempts to be independent, especially from his mother. Actually, of

course, he is still very dependent upon her, though he feels that women don't "know the score." Usually he idealizes his father but resents any effort on Dad's part to "boss" him or control his behavior.

Girls manifest an increased activity during preadolescence. Although they have little sex interest, they want to appear grown up and, more than boys, attempt to adapt themselves to the realities of life. They dramatize themselves and like to assume adult roles with the appropriate properties and costuming, such as higher heels and lipstick. This play, however, is accompanied by much giggling and self-consciousness. Some girls, on the other hand, become tomboys. They are accepted by boys, in contradistinction to the boy who is effeminate and likes to play with girls. Ridicule is his portion.

Girls are hurt if they are not included among the leaders in their schools and neighborhoods. Their clubs are secret societies. In one private school there has been a "devil's club" formed by succeeding groups for many years. The rules of the club require members to use their fingers for handling butter, to collect cigarette butts, and to smoke. Girls have secrets which they confide to every other girl with the solemn assurance, "You are the only person I am going to tell."

At this age girls are tormented by feelings of inferiority and inadequacy. As a result of this condition, coupled with a desire for independence, they criticize their parents and often identify themselves with older girls and women. Some girls, overwhelmed by a sense of inferiority, become quiet, passive, and very unhappy. A greater proportion of them, however, outwardly exhibit a noisy self-assurance.

A Psychology of Growth

Preadolescent girls also work out plans for their future and concern themselves with problems far beyond the interest of boys of the same age. Girls try to appear sophisticated, do better schoolwork than boys, and attempt to gain recognition from adults. Sally Benson has described this age group very well in her book, "Junior Miss."

Like boys, girls have many anxieties about their physical growth. Breast development, growth of pubic and axillary hair, size of abdomen, and posture concern them greatly. While their physiological development is usually a source of pride, they are sometimes sensitive about it and, if they are very dependent upon their mothers, they may go so far as to attempt to reject their maturity emotionally and, in extreme cases, develop *anorexia nervosa*. Such was the case with Barbara, a ten-and-a-half-year-old girl, who became antisocial and unhappy. She imagined that she was unattractive because her skin was dark, her abdomen protruded, and one breast was larger than the other. An eleven-year-old boy was similarly disturbed because comparison at the "club" revealed that his genitals were smaller than those of his associates.

Serious anxiety states are not infrequent during the pre-puberty years, that is, from eight to eleven. They occur about three times as often in girls as in boys and resemble those of the adult with an anxiety neurosis. The child suddenly becomes panic stricken, cries, and is overwhelmed by the fear of terrible illness and possible death. This state may be accompanied by perspiration, choking, gagging, very rapid heart, trembling, stomach-ache, dizziness, or any other somatic complaint. The attack usually subsides in thirty minutes to two hours. Inquiry into the cause

nearly always reveals that an anxiety attack has been precipitated by some unhappy occurrence, such as an unpleasant hospital experience, a serious fright, or the death of a friend or relative.

Children who have these attacks are almost invariably the good boys and girls, approved by their elders because they are quiet, obedient, and respectful. They are, in other words, children who have been broken to the will of adults, sensitive children who have never been able to fight back. Further inquiry usually reveals that, in addition to having to conform to high standards of behavior, they have been held to very rigid food and training schedules, especially during infancy. They have been fed every four hours, to the minute, have been broken from the bottle when very young, have been the subject of attempts at early toilet training, and have been taught obedience to authority without question. Work with mothers and fathers nearly always reveals the still more significant fact that these children were not wanted in the first place and never enjoyed the affection that their sisters and brothers received from one or the other or from both of the parents.

These various factors are illustrated in the case of Sally, a pretty, intelligent ten-year-old girl who was taken to a physician for examination because of spells during which she cried, gagged, and said, "Am I going to die?" The attacks usually occurred at night, but occasionally they came on in the morning. Sally had the first one on her ninth birthday. Thereafter they recurred frequently, and the child lost weight, refused to go to school or to church, and finally preferred not to leave her home at all.

Study of the case revealed that one of Sally's friends had

A Psychology of Growth

died about four weeks before she had her first attack. The day before the attack occurred, Sally's teacher had lectured her pupils severely on the subject of some objectionable behavior. Little Sally, who had always been a good child, was not at fault, but the teacher's words frightened her badly and she became extremely fearful of doing something wrong and incurring displeasure. On her birthday, the child suffered a great disappointment. The mother, who was not feeling well because of her fourth pregnancy, failed to give Sally a birthday present. On that day, the little girl had her first attack.

After several interviews, the mother was able to say frankly that she had never loved Sally as much as she loved her two older children and the new baby. Although she was not able to account exactly for the difference in her feelings for the children, she recognized the fact that there was something about Sally which she did not like. She realized also that the strict schedule and rigid discipline that she had inflicted upon the little girl were, at least in part, an expression of resentment toward her.

The child revealed to the physician that she had many frightening dreams, in which she was chased by a burglar and a witch. Eventually she volunteered the information that the burglar resembled her father and that, at times when the witch removed her mask, she proved to be Sally's mother. When the physician had obtained the child's confidence, she began to talk about her fears of her parents and teachers and her resentments toward them. Finally she admitted that she hated both her parents and her teachers, as well as her brothers and sister. After a number of talks with the physician, Sally realized that her attacks were

brought on by fears that accompanied her hates, especially her feeling toward her mother. The first attack, it must be remembered, occurred on the birthday when the mother failed to give the child a present.

The little girl, who had received a very strict religious training and had been convinced that it was a serious sin to hate, did not doubt that she was a very bad girl. That attitude was intensified by the fact that she was physiologically very mature for her age and was fast approaching puberty, which is a time when children become increasingly aware of what people think of them and when they experience a heightening of conscience.

The table on page 154 summarizes ten cases of acute anxiety states studied by the writer. When the patients are studied as a group, the similarity of the cases, particularly in regard to precipitating factors, becomes readily apparent and it is possible to see how unfavorable conditions bring about mental ill-health.

Visual disturbances on a functional basis, apparently due to spasm of the blood vessels, often begin during the preadolescent period and occur with increasing frequency into adulthood. It is possible to get tubular vision (in which the patient can see only objects directly in front of him) or marked generalized decrease in vision or hemianopsia. The following cases illustrate this condition.

On Christmas Eve, when ten-year-old Frank was playing with his toys, he found that he could see only those objects that were directly in front of him. A careful history revealed that he had many fears, that he thought he was bad, and had been taught that if he did not behave Santa Claus would not bring him any presents. All of a sudden

A Psychology of Growth

FEARS

Case: Sex: Age at onset	Precipitating condition	Parental attitude	Schedule in infancy	Result of training program	Primary fear	Outstand- ing symptom	Panic
1—F 9 ½ yrs.	Death of friend	Rejection (father) Apprehen- sion (mother)	Rigid	Broken	Hate of father, mother, and brother	Abdominal distress	Fear of ill- ness and death
2—F 7	Death of mother of school- mate	Extreme apprehen- sion	Rigid	Broken	Hate of mother	Nausea	Fear of ill- ness and death
3—F 9	Sex in- struction	Rejection (mother)	Rigid	Broken	Hate of mother, fear of sex	Nausea and vomit- ing	Fear of ill- ness
4—M 10	Death of friend	Rejection Apprehen- sion	Rigid	Broken	Hate of mother, father, and friend	Trembling	Fear of be- ing killed
5—M 9	.....	Extreme apprehen- sion	Semi- rigid	Broken	Hate of father, mother, and brother	Pain in joints and extremities	Illness and death
6—F 8	Death of sister	Rejection	?	Broken	Hate of mother and sister	Abdominal pain	Fear of T.B., menin- gitis
7—F 9 ½	.....	Rejection Apprehen- sion	Rigid	Broken	Hate of mother and brother	Trembling and crying	Impending danger
8—F 10	.....	Rejection	Rigid	Broken	Hate of mother and sister	Trembling and ab- dominal pain	Illness
9—F 8	Exhibi- tionism; fear of teacher	Rejection	Rigid	Broken	Hate of family and teacher	Inability to recite in school	Suffoca- tion
10—F mos.	?	Apprehen- sion Rejection	Rigid	?	?	?	?

he became very frightened, imagining that someone was coming after him and that a burglar was looking in through the window. It was then that the visual disturbance began. When Frank was able to analyze his fears with the help

of a physician, the difficulty cleared up and has not recurred during the succeeding ten years.

Christine, a fourteen-year-old high-school girl, suddenly "went blind" after class. The attack lasted about thirty minutes and was followed by many others of shorter duration. At the time of the first attack, she went to the school nurse and, later, to an ophthalmologist, who found nothing wrong with her eyes. She was a highly intelligent but emotionally disturbed adolescent. Inquiry revealed that she had never lost all of her vision, as she had first reported (these patients do not become totally blind), since she had been able to go to the school nurse without assistance. The first attack had been precipitated by a scolding, in the course of which a teacher had accused her—unfairly, the girl believed—of doing inaccurate work. Analysis of her case showed the girl that she suffered a diminution of vision when she became very frightened.

ANOREXIA NERVOSA

The uncommon, but serious, condition known as *anorexia nervosa* is characterized by loss of weight, evasiveness, lack of normal interests, and sometimes difficulties in school. It usually begins during the preadolescent or the early adolescent period. The physical examination is negative, except for emaciation and possible food-deficiency diseases. The condition occurs in girls who are extremely dependent upon their mothers and who reject the idea of normal physiological development.

Such was the case with Janet. She had been well, up to the age of twelve, when she expressed a dislike for fattening foods and began to lose weight. She ate nothing but

A Psychology of Growth

vegetables in small quantities, skim milk, and fruit. At the same time, in an effort to deceive her parents about the amount of food that she was consuming, she used many different devices, such as eating by herself whenever possible, secreting food in her handkerchief and later throwing it away, and disposing of her milk whenever no one was watching. She insisted that she was not hungry, failed to eat lunch at school, and feigned illness at mealtime when she was at home. When her loss of weight became serious, she was placed in a hospital, where all tests for organic disease were negative.

Janet's mother was a very self-centered, neurotic woman, who criticized the girl a great deal. When Janet reached preadolescence, she became a tomboy and, because she was a good baseball player, boys accepted her as a playmate. Because she wanted to be a boy, she was disturbed when she noticed that her hips were getting larger and her breasts beginning to become prominent. This was the cause of her dieting.

Patients like Janet are very resistive to psychiatric help, insisting that there is nothing wrong with them. They do best when removed from home. Usually they can be placed in a boarding home, but sometimes it is necessary to send them to a hospital and use insulin. When Janet was forced to face the situation as the result of the insulin reaction, she developed a hatred for her physician but accepted psychiatric help. She then told that she had wanted her mother's affection and approval and had received very little of either. She also explained that she had often heard her mother complain that menstruation was a nuisance and that women had all the inconveniences

in life. The little girl had other serious anxieties about sex and for a long time insisted that she did not want to know anything about "that stuff." She agreed to gain weight, however, if she could leave the hospital. For months she poured out her resentment against her mother, but finally she recognized that her anger was due to a strong desire for the mother's approval.

Adolescence

This is a period of rapid growth marked by maturation. Growth takes place at markedly variant rates in different boys and girls. There are also wide variations in the different aspects of growth in the same individual. At this period of growth there are physical, intellectual, and emotional changes. In the process of trying to grow up and make an adjustment to society, many important problems present themselves. Sex adjustment, independence, weaning, and inferiority are problems common to all adolescents. The seriousness of these and other problems depends upon methods that have been used in rearing them up to this age. Solution of the problems is essential for mental health. Childhood insecurities, anxieties, and resentments add much weight to the problems of adolescence.

ADOLESCENCE is a period of growth second only to infancy in the rapidity with which the body develops and life patterns manifest themselves. It is notable also for marked variations in the rate of growth in different boys and girls and the uneven development of the various aspects of growth in any one individual. For example, some girls begin to menstruate at the age of nine, while others who are entirely normal do not reach this stage of physiological development until they are nineteen years old. As a rule,

emotional maturation parallels this physiological change, but that is not always the case. A girl may be physiologically mature and emotionally very immature. Boys exhibit the same variations, though perhaps not to so great an extent.

In reference to these various growth patterns, a group of adolescents has been compared to a number of girls and boys traveling from New York to California.¹ Some may go by air, others by rail or sea, and still others on foot. Practically all of them will reach their destination, but at widely different times.

The growth changes that occur at adolescence are physical, intellectual, and emotional. Physical growth is usually very rapid. Boys often grow seven or eight inches in a single year. Though they may reach manly stature, however, they should not be judged by adult standards. A boy or a girl whose chronological age is fourteen may have the physical growth of the average sixteen-year-old, the intelligence of the youth of eighteen, and the emotional development of a child of eleven. How old is such an individual? Because of the unevenness of his development, it is impossible to decide what should be expected of him without considering the different aspects of his growth separately and determining the developmental level of each. Under the circumstances, it is obvious that the youth himself will become confused and disturbed about himself.

Because of their rapid growth, adolescents fatigue easily and have poor motor coordination. They find it hard to stand on their two feet like proper ladies and gentlemen; they have to change position frequently. Often they are accused, unjustly, of being lazy. Changes in resistance to

A Psychology of Growth

disease occur at adolescence. For example, there is a marked decrease in respiratory diseases and a limited resistance to tuberculosis; anemias are common. Adolescents show an increase in surface temperature. The girl who says, "I'm not cold," and wants to wear light clothing is not following some freakish fashion, as adults often insist. She is telling the truth as she understands it; she feels warm. In addition to the development of secondary sex characteristics, there are frequent changes in the metabolism and fluctuations in the physiological aspects of the entire body. These characteristics of adolescence are important because of the effect that they have upon the individual's mental attitudes.

There is a close relationship between the growth process and the glands of internal secretion. In view of the over-enthusiasm that sometimes results from the use of glandular extracts, especially when they are administered in an effort to correct variations in growth at adolescence, it is well to note which conditions can and which cannot be treated in this manner at the present time.

A deficiency of the anterior lobe of the pituitary gland gives rise to Simmond's disease, a fatal disorder characterized by a general failure of the other endocrine glands, particularly the sex glands, the adrenal cortex, the thyroid, and the parathyroids. Acromegaly and gigantism result from overactivity of the anterior pituitary.

There is no evidence to prove that pituitary insufficiency causes retardation in growth, obesity, or menstrual disturbances. Pituitary dwarfism is a very rare condition. Most instances of retardation in growth observed in children result from thyroid rather than pituitary insufficiency.

Improvement in both physical and mental conditions is obtained from the administration of thyroid extract.

There is no clinical condition due to overactivity of the posterior lobe of the pituitary gland. Because *diabetes insipidus* is often associated with destruction of the posterior pituitary, the administration of the posterior pituitary substance is successful. Many cases of polyuria and polydipsia seen in practice are psychogenic in origin and can be successfully treated by psychotherapy.

Disorders of the hypothalamus involve many metabolic and neuropsychiatric disturbances. The obesity of true Fröhlich's syndrome (which is an uncommon condition) is due to the pressure of an expanding lesion on the hypothalamus. Lesions of the hypothalamus are sometimes associated with peculiar appetites, vasomotor disturbances, and high fever.

The development of precocious puberty in tumors of the pineal gland is probably due to pressure on the hypothalamus.

Hypothyroidism is common during adolescence and is a factor in fatigability, lack of sufficient energy, indifference, and lassitude. Changes in the degree of function of this gland may be frequent during adolescence. For that reason, it is sometimes necessary to repeat metabolic tests once or twice a year in order to be accurate in evaluating the effect of thyroid disturbances on behavior.

Hyper- and hypoparathyroidism may produce symptoms suggestive of emotional disorders. Medication by which these disturbances can be relieved is now available.

Much use has been made of pituitary and sex hormones in treating dysfunction of the sex glands. On the whole,

A Psychology of Growth

these substances have been disappointing from a clinical point of view, with the exception of chorionic gonadotropin in cryptorchidism, where it has a distinct usefulness. The male and female sex hormones have also a usefulness as substitution therapy in supplying the glandular products while the organs themselves are not functioning properly. Because of the psychologic effects of glandular therapy, as well as the possible harm it may do to the very complex endocrine system, it should not be used except after thorough examination and the discovery of positive evidence that it may prove beneficial.

Growth changes create many anxieties in the mind of the adolescent. He is especially concerned over differences between his growth and that of his friends and is often frightened by the possibility that there is something the matter with himself. These worries may appear negligible in the eyes of the adult, who knows that most of them are groundless. To the adolescent himself they are just as important as he considers them to be, as is shown in the following cases.

Mary was a happy, well-adjusted girl who did good schoolwork and was popular with other children until she was between eleven and twelve years of age. At that time, she began to lose her friends, and the grief she felt was reflected in her schoolwork. She also lost favor with her teachers, became very unhappy, and cried easily. This situation grew increasingly serious over a considerable period of years. The cause was obvious. Although Mary's growth was rapid, she showed no signs of secondary sex characteristics. She did not menstruate until she was seventeen years old. During the interval, she looked and

acted three or four years younger than her chronological age. Her interests were those of a little girl until she was more than eighteen, and thus the disparity between her immature behavior and the conduct of her contemporaries was constantly increased.

This delayed emotional growth created serious anxieties in Mary's mind. She was convinced that there was something wrong with herself and attributed her friends' desertion to that peculiarity. Because she no longer shared the interests of her contemporaries, and her behavior seemed juvenile to them, she lost her self-confidence, became convinced that she was stupid, and was alternately very critical of her friends and of herself. These attitudes persisted for many years, even though she was told the reason for her predicament and every effort was made to restore her self-confidence. Indeed, she was not able to understand the reason for her maladjustment fully until she finally matured and caught up with her group, at about the age of twenty-one.

Analogous problems result from unusually early maturation. There was Margaret, for example, whose parents took her to a physician for examination because of temper tantrums and inability to get along with other children. In this case, also, the cause of the trouble was clear. Margaret had begun to menstruate at the age of nine and a half. By the time she was ten and a half, she had the emotional growth and interests of a fifteen-year-old. The great difference between Margaret and her friends of her own age made them and their mothers think that she was peculiar. When, for that reason, they avoided her, the child became frightened and frustrated. As in the case of Mary, who

A Psychology of Growth

matured late, it was necessary for parents and teachers to be very patient and understanding in order to minimize the child's maladjustment. The treatment of these girls necessarily continued a long time until, in each case, the patient's level of growth was equal to that of her friends of the same age.

Although similar differences appear among boys, their reactions are not usually so severe. Certain dangers, however, are inherent in the situation. Because boys are hero-worshippers, the one who develops rapidly often becomes the leader of his group. Unless he is stable and well adjusted, he may lead the group into difficulties. The immature boy, on the other hand, is easily led and will do many things, even some that he knows are wrong, if he thinks he will thereby win the esteem of the leaders of his gang. One such boy stole many articles and was finally caught breaking into a store to get baseballs and athletic equipment. He hoped by this conduct to appear tough in the eyes of his more mature friends. The penalty for refusing to do what the gang wished was being called a sissy and ostracized from the group.

Although there are no abrupt changes in intelligence growth during the period of adolescence, certain lines of development may regularly be expected. One evidence of mental growth is the appearance of the ability to do abstract thinking, which begins at the age of twelve. This is an important development, in view of the fact that the norms of society are abstract and the gradual understanding of them is a vital factor in the adjustment of the child to his environment, as stated on page 65. As a test of the twelve-year-old's ability to understand abstract terms, one might

ask the questions: What is pity? What are envy, revenge, charity, justice? From the point of view of the adult these terms are so simple that parents are not always likely to realize that they have no meaning for a child until he has a mental age of twelve years. Even when a child has the intelligence growth to comprehend abstract terms, they do not concern him until he develops a social consciousness. This occurs with the emotional growth of maturation. All his life he has heard about the concepts of truthfulness, right, and wrong, and has been expected to respect them; but it is not until adolescence that he begins fully to appreciate their implications and to comprehend the standards by which he has always been supposed to live.

The most marked changes take place in the emotional aspect of growth. This is shown particularly in the increase of conscience at the approach of adolescence and during that period. Although the still, small voice begins to whisper to a child at a very early age—late infancy or even before—it becomes much stronger and more insistent in the preadolescent and adolescent boy and girl.

Idealism is stronger during adolescence than at any other time in the life of the individual. It may serve the child as a valuable guide in working out his own problems. With proper cooperation, it can be used to develop social and religious concepts and to help the youngster achieve the necessary feeling that he has a place of some importance in society.

At adolescence, for the first time, children see themselves as others see them. Motivated by sex attraction, they become acutely conscious of the impressions that they make on others. For this reason, their behavior is often para-

A Psychology of Growth

doxical. A boy wants a good suit of clothes in place of his old pants and sweater; the girl wants lipstick and nail polish. Given their own way, they dress in the most extreme fashion and affect a highly sophisticated manner—but only for a few hours, or, at most, a day or two at a time. Following such a performance they go to the other extreme—wear their oldest clothes, perhaps, refuse to keep themselves clean, and try to appear absolutely indifferent to anyone's opinion. In other words, they alternate between very grown-up and very childish behavior. The reason is obvious: they try to act grown up and find the task too difficult. It takes many years before they can act grown up all the time. Meanwhile, because of the difficulties they encounter and the disappointments they suffer by reason of their failures, they throw temper tantrums, are moody and unhappy, and become a trial to their parents and to others with whom they live.

Biologically, adolescence is characterized by maturation; that is, the development of strong sex impulses and sex attraction. Previously the child was interested only in himself. In his own mind he was almighty, the one individual in the world. With maturation, however, comes deflation, and he realizes that he is only one of the multitudinous individuals in the world. Now it becomes necessary for him to recognize the demands of the social system, and he begins to try too many problems in his mind. These must be satisfactorily solved if he is to become a well-adjusted adult. The seriousness of the problems is determined by the way in which he has been brought up. If his growth has been normal up to this point, it will continue with a minimum of difficulties; if it has not been normal,

the difficulties will be proportionate to his maladjustment. Boys and girls bring to adolescence the confidence or insecurity, the self-reliance or need for help that they have acquired during childhood. These qualities have a strongly determining influence on their ability to solve the inevitable problems that confront the near-adults.

There is, to be sure, a difference between inherent and acquired problems. For example, the girl who does not begin to menstruate until she is eighteen is emotionally immature for a physiological reason. This condition is not at all the same as the emotional immaturity of the youngster who has found growing up too difficult and, therefore, has a distorted growth or has regressed to a more immature but more comfortable level.

Four major problems trouble the minds of all adolescent boys and girls. In our civilization, one of the foremost of these is sex, for the reason that the adolescent is caught in a tug of war between his own developing sex impulses and the demand of society that they be controlled. Whether or not the child can cope with this situation depends upon the knowledge that he has acquired. The child who has been properly taught and is not frightened by sex will welcome his maturation and get the greatest satisfaction from love. Conversely, there will be conflicts, doubts, and unhappiness in the mind of that child who has been given the idea that sex is wrong and sinful, that normal sex interests and habits are bad, or that they will make him ill or affect his mind. The girl who has grown up normally and understands about menstruation is thrilled by the onset of this process. The frightened girl may experience great distress during her first menstrual period and have similar

A Psychology of Growth

difficulty for the remainder of her life. Analyses have shown that much of the discomfort of the menstrual period is psychological rather than physical.

This fact is illustrated by a thirty-year-old woman who complained of severe menstrual pains. When her history was taken, she told that she had known nothing about menstruation until her first period occurred. While she was visiting an aunt, she awoke one night to find herself "smeared with blood." This caused her to fear that something was seriously wrong and that she might die. Afraid to disturb her aunt to ask for advice, she washed herself with cold water. In the morning she talked to the aunt, who said, "That was the very worst thing you could have done. Now you'll have cramps for the rest of your life." Although she had no pain with the first period, she fulfilled her aunt's prediction and had "terrible cramps" every month thereafter. Repeated gynecological examinations were negative; but only after prolonged psychiatric treatment did the patient realize that the cramps were due to the dread of painful menstrual periods. With a slowly changing mental attitude, the cramps almost entirely disappeared.

Thus there is a great need for intelligent sex education. This should have begun much earlier. In fact, as we have seen, the starting point should have been the attitude of the parents and their instruction of the child from his earliest infancy; but whether or not the child has had the benefit of a healthy attitude on the part of his parents and adequate sex education all along the way, he is still in need of intelligent answers to the questions that arise as the result of his own growth problems. Nurses are frequently consulted about these matters, and they should be prepared to

discuss them intelligently. In order to do this a nurse must first examine her own prejudices and difficulties and, if necessary, correct her own attitude. She can obtain much help from good books on sex education. Many works on the subject have been published during the past ten or fifteen years. A list will be appended at the end of this chapter.

The second problem in the minds of all adolescents has to do with independence. As they mature physically, children like to feel that they are grown up in other ways. "I'm going to do as I please," the adolescent tells his parents. "You can't make me do anything." That is an entirely normal expression of the child's feelings and almost an exact statement of fact. Whether parents like it or not, those who are intelligent realize that they cannot force the adolescent to do any of the things that they consider most important—to go through school, for example, and to keep out of serious difficulties outside the home. If they have permitted the child to grow up normally, however, he has developed sufficient self-reliance to avoid real trouble and they have no need to fear the consequences of his declaration of independence. As a matter of fact, they have given this child increasing independence since his infancy; by the time he demands freedom of action at adolescence, he already possesses it. Such parents can have confidence in the child's judgment and must have learned that he is capable of taking care of himself up to a point that he knows better than anyone else.

In spite of his demand for independence, the adolescent knows that he needs help in solving many of the important problems that confront him. Although he wants inde-

A Psychology of Growth

pendence, he is still dependent upon his parents and upon other adults. As a matter of fact, the more indirectly he asserts his independence, the more certain it is that he is fighting his own desire for dependence. When his independence is respected and he can, therefore, have confidence in adults, he goes to them with his sex problems; his social, vocational, religious, and physical problems; and the endless number of questions evoked by the whole business of growing up and making adjustments to society. This is a field in which the nurse and the physician can be very helpful. They are consulted frequently, but not nearly so frequently as they should be.

Usually the struggle between independence and dependence continues through adolescence and adulthood. While the individual desires independence, he also wants to be loved, which is dependence. At times, his independence costs him dearly in terms of frustration, criticism, loss of jobs, and disharmony in the home. These reactions indicate that the parents did not give the individual security during his childhood and that he never enjoyed that feeling of approval which makes for self-confidence and the willingness to accept help from others.

L. R., a man twenty-four years old, was one of these individuals. Trouble began shortly after his marriage, when he insisted upon dominating his wife and, rather than accept her reasonable suggestions, often did things in ways that he admitted were not efficient. "If I want to do something," he said, "I'm going to do it. In my own home I'm going to have my own way." When he was asked if he did not feel like a small boy when he made such statements, he admitted that this was true. "But,"

he said, "I was never allowed to do anything in my parents' home and now that I've got a home of my own I'm not going to let that kind of thing get started."

In elaborating on this statement about his childhood, he described a home in which his father had little authority and his mother dominated the family. She had forced her ideas upon the boy and set up rigid standards, without giving him credit for doing anything right. The mother selected the boy's clothes, failed to give him the spending money that the family could well afford, refused to allow him to play football, punished him if he fought, and kept him in the house if he did not get the highest grades in school. At the age of fifteen, he ran away from home and went to live with an uncle in another city. As punishment, the mother obliged him to stay there for a year. Although he had never before admitted the fact to anyone, he confessed to the physician who questioned him that during the year away from home he had been very homesick. These disclosures showed that the boy had been extremely dependent on his mother. He had tried hard to please her but, because she never approved of what he did, he had become resentful. When he reached adolescence, he determined not to be dominated by anyone and, although he fell in love and was married, he could not tolerate the idea of being dependent in any way on his wife. His home, he thought, must be different from that of his parents.

Betty was another child who never received any praise from her mother. On the contrary, she was unwanted, unloved—the object of constant criticism. Not surprisingly, she became a behavior problem. When she refused to be "broken," the mother beat her severely, and Betty

A Psychology of Growth

fought back by refusing to do anything unless she was forced. At the age of twenty-two, she began to have pain when she was away from home. She also complained of shortness of breath and nausea and had a dread of becoming ill and vomiting in public. When she analyzed this fear, she found that she dreaded being sick in public for the reason that it might cause people to be sorry for her and she didn't want sympathy from anyone. She said that she wanted to be independent of everyone. Actually this girl was very insecure. Because she felt a great resentment toward the mother who never accepted or approved of her, she tried to convince herself that she could live without even sympathy from anyone.

Although the reactions of these two persons may appear to be extreme, they are not uncommon. Many individuals have similar, if less severe, reactions.

An important problem of the adolescent, then, concerns the use to which he is going to put his independence, once he has obtained it. Many individuals use it unwisely and soon get into trouble. Usually the cause is not hard to find. Youngsters who make serious mistakes are likely to be those who for years were tied to mother's apron strings or kept under father's fists, or both. Since they were not permitted gradually to take on responsibilities proportionate to their age and abilities, they never developed that self-confidence which comes from learning how to do things; they never became self-reliant. When they acquired independence, they did not know what to do with it.

When adolescents go to adults for "advice," what they really want is a good listener, someone in whom they have confidence and to whom they can talk freely about their

problems. The nurse and the physician, in this role of counselor, can supply medical facts (being sure of their information, of course, before passing it on); but they can render even greater service by lending their ears, rather than by giving their opinions. Though they may be able to make some suggestions, their most valuable help comes from permitting the patient to find the answers to his own questions and from giving him only the backing that he needs to translate his ideas into action.

The third problem of the adolescent has to do with weaning. This process of becoming weaned from parents is usually difficult and, in many cases, is never completed, even in adulthood. Continued dependence on parents may be the cause of many maladjustments, since a heterosexual development is essential for success in life; that is, every child must transfer his affection from his parents (particularly the mother, in the case of the boy, and the father, in the girl's case) to someone outside the family.

There are many reasons why boys and girls never become emancipated from their parents. One is the insecurity that results when apprehensive parents keep a child dependent and refuse to allow him to grow up and take care of himself. The youth who lacks security is always frightened; he often believes the familiar adage, "Mother knows best," and the crippling corollary, "I know very little."

The situation is illustrated by the case of Janice. She entered nurse's training at the age of eighteen and, although she was physically well and possessed high intelligence, she was painfully homesick for many months and had great difficulty with her work, both practical and academic. Always apprehensive, she was so fearful of making a mistake

A Psychology of Growth

that she did her work very slowly, used no initiative, never recited or volunteered opinions. As a result, she was not asked to participate in the activities of the other girls and became a thoroughly maladjusted student nurse.

The story behind this story begins with a very strict, neurotic mother, against whom Janice, unfortunately, never rebelled. All through high school the girl conformed absolutely to her mother's ideas. She never had friends who did not meet the mother's approval, always wore the clothes that her mother selected, always came home at exactly the time her mother set, and altogether followed her mother's wishes to the most minute detail. The father supported his wife's ideas, but obviously had little to say about domestic matters. Janice was greatly attached to him, always used him as a standard by which to measure the boys she knew, and was afraid to marry lest her husband should not turn out to be like her father.

Coupled with her dependence and apprehension, Janice felt extreme resentment toward her mother, although she was too frightened to admit that fact even to herself. When she left home to go into the hospital, where she was expected to act and think for herself, the girl was lost. This type of problem, which is very common among student nurses, is more prevalent among girls than among boys.

Like Janice, many adolescents compare others with their own parents. That is entirely normal, but if a boy or a girl expects to marry someone who acts and thinks like his or her mother or father, many difficulties may result. Serious weaning problems occur in cases of extreme attachment to parents. There is, for example, the very honest, obedient, clean, polite ten-year-old boy who washes his ears,

combs his hair, wears a blue-serge suit, takes his mother's arm, tips his hat and says "How do you do?" He is at once too greatly attached to his mother and too frightened to do the things that normal boys enjoy. He is heading for serious trouble when, at adolescence, his sex impulses become very strong and sex wishes develop. These wishes will then be directed toward that member of the opposite sex of whom he thinks the most—in this case, of course, the mother. He may then continue to be very strait-laced and proper, or he may break into open rebellion. His outbreaks of temper are likely to reach alarming proportions, because at adolescence a child is often violent. Parents should be helped to understand the reason for this rebellion and to recognize it as a necessary part of the child's development. If he does not rebel, he is in danger of never becoming weaned at all. When interviewed, children of this kind express hatred of their parents in direct proportion to their attachment.

Parents normally want to keep a child as long as possible. In order to force them to realize that he is grown up and determined to make decisions for himself, the adolescent must rebel and treat his parents in a way that they consider unkind. There is much truth in the old adage that the boy who is not mean to his mother during adolescence will be mean to his wife.

Probably the most common reason for the complaints of wives and husbands is that each criticizes the other for not behaving like mother or like father. The words of the old song, "I Want a Girl Just Like the Girl Who Married Dear Old Dad," are a popular expression of a profound psychological truth. In the case of that individual who

A Psychology of Growth

has never been weaned, this tendency to compare his wife to his mother results in harsh criticism if the young woman does not think, talk, dress, or keep house just as his mother did. Similarly the wife may bring great unhappiness upon herself and her husband if she expects him to be the counterpart of her father. Many such adult problems stem from adolescent difficulties.

The fourth serious problem in the life of the adolescent has to do with his feelings of inadequacy and inferiority. These feelings, of course, do not suddenly spring into being with the approach of adolescence, but are the product of improper training through all the preceding years. Children may be told from fifty to one hundred twenty-five times a day that they are bad and of no account without it having any apparent effects at the time. Often the results do not manifest themselves until the child has reached preadolescence or adolescence itself; that is, until he has arrived at that stage in his mental growth when he becomes acutely conscious of others. Then the damage that has been done produces behavior that is shocking to the adults who unwittingly caused it.

Such was the case with Nancy. She was a very intelligent and attractive child. Her parents unquestionably wanted her and approved of her, in general, but they set up impossible standards of behavior for her. From their ministerial ancestors they had received the idea that it is extremely important to teach a child complete obedience and consideration for others. They succeeded with Nancy until she was nine and a half years old. At least, up to that time she was very obedient and quiet; then, suddenly, she began to have temper tantrums. When a physician who had obtained her confidence asked why she became angry,

she replied, "Because I hate myself." She felt that she was thoroughly bad and gave two principal reasons for that conviction: disobedience and disrespect.

Many boys and girls in high school have the same feeling about themselves and react in a similar manner.

The individual who feels inferior responds in one of two ways. Either he turns into a quiet, shut-in, a social or anti-social person, who is very unhappy and develops many resentments, or else he becomes aggressive, egocentric, all-knowing. There is, of course, no such thing as a superiority complex. Those unfortunates who give the impression that they consider themselves superior are only covering up their feelings of inferiority.

The minds of all adolescents are disturbed by the four problems: sexual adjustment, independence (and its corollary, dependence), weaning, and the inferiority complex. These perplexities vary in degree with the development of each individual from birth and with his training during childhood, especially as it was affected by the attitudes of parents, teachers, church leaders, and others concerned with the guidance of children.

In addition to these universal problems, the adolescent must cope with his individual difficulties, those anxieties which have resulted from frustrations in infancy and those other fears which he has acquired along the way. He must now, furthermore, face the necessity for accepting his own innate characteristics and those environmental circumstances which are unavoidable. He must learn how to live with himself and with those external conditions over which he has no control, however rebellious he may feel about them.

Richard has to accept his delayed or slow development;

A Psychology of Growth

George must reconcile himself to the probability that he will never be tall; Mary has to face the fact that she is less attractive than Susan; and Elizabeth, the knowledge that she has poor motor coordination and no athletic ability. Jack learns that he can never be a star football player and Elsie finds that she is not a good actress. Adolescents are much concerned about their growth and physical characteristics. Failure to reach some desired goal creates a serious problem.

In the matter of intellectual and emotional characteristics, adolescents have to face the same irrevocable truths and learn to accept themselves as they are. Some have special abilities and others have special defects. Some do well in academic pursuits and others fail. The latter group not only suffers disappointment but has to endure the scorn of teachers and sometimes of parents. It is unfortunate that during this period of rapid growth, when mental efficiency may be low, adolescents are often faced with a school curriculum that is most difficult. The struggle for grades that will be acceptable to colleges, together with strong individual competition, is a tax even on those who do not have suppressed and exhausting fears and serious problems of adjustment. Innumerable individual characteristics contribute to the problem of making an adjustment in society. Some of them are in the mind of each adolescent and the anxieties that they create are great or small, depending on the patterns of response that the individual has developed.

In the process of growing up, it is essential for each child to feel that there is something that he can do well and that there is some small niche in society for him. The security

that he originally found in his parents and later in his school is now enlarged to include the community, and finally rests in himself. If he is to make a satisfactory adjustment, he must have self-confidence and faith in his own ability to meet new situations.

Mental growth is the measure of mental health in adolescence, as it is at any age. By the time that a boy (or a girl) reaches adolescence, he should have developed much self-confidence and, as a result, the ability to take the responsibility for his own conduct. He should be responsible for his health habits and should be vitally concerned about his physical development. He should be responsible for his schoolwork, having begun to take on that responsibility in the first grade. He should be able to continue his socialization, and that process will not be too difficult if he learned to play well with other boys and girls during childhood. Now, as his contacts become wider, he should know how to conduct himself in many social situations; he should be responsible for getting home at a reasonable hour (which is not necessarily the time set by his parents), and should be able to avoid serious difficulties. Parents can no longer supervise his social activities. If they are wise, they have no wish to do so; if they have brought the child up well, there is no need for the supervision.

The adolescent's social concepts and his attitudes toward society are shaped by the current political philosophy of the country in which he lives, the doctrines of the church in which he was reared, and the standards of his home and his community. Like the adult, the adolescent wants to believe that he solves his problems by logical thinking and, indeed, he makes a great effort to do so. Actually he

A Psychology of Growth

devotes much time to an attempt to justify the prejudices and ideas that have been handed down to him and to make a comfortable adjustment to society. If he has been brought up to be a "strong Republican Methodist," for example, he may argue fervently to convince others that his is the one true philosophy; but the more argumentative he becomes, the more he shows himself to be uncertain in his own mind. Should he be unable to convince himself of the truth of the concepts that his family has given him, he may rebel and try to prove that his parents and society are wrong and, perhaps, proclaim himself an atheist and a communist. This struggle, which begins in adolescence and continues throughout life, shows the effect of the social-political concepts upon the individual and the effect of the individual upon these concepts.

The rapid development of the adolescent often causes trouble in school, particularly at the secondary level. High-school boys and girls are sometimes overwhelmed by very strong sex feelings and are likely to have difficulty with the frustrated teacher who objects to behavior that results from this development. With the adolescent's rapid physiological or physical growth there are unquestionably increased hormone secretions, and this change causes him to become inattentive and, therefore, to do poor schoolwork. Some boys and girls are unable to study thirty minutes a day.

During the past twenty years, educators have given much thought to the matter of curriculums for adolescents. As children grow older and individual intellectual capacities manifest themselves, there should be ample provision for developing these. Some youngsters who have high intelli-

gence, however, do not know how they want to use it; others may have outstanding mechanical aptitude and no capacity for academic pursuits; while still others will never be able to follow any rigid school program. A high school, therefore, needs a very broad curriculum, in order to keep its requirements within the abilities of all its students and thus develop their self-confidence and gradually replace the security given by their parents with the confidence in themselves that is essential to adults.

Some children make this adjustment very successfully, others succeed temporarily, and all too many fail altogether. The last mentioned are those individuals who are unable to grow up and take on the responsibilities that society sets up for the young adult. They respond to this maladjustment in two ways—by showing open rebellion or by developing neurotic manifestations and taking refuge in illness. Those who rebel either refuse to do anything; that is, they adopt a passive aggressive attitude, or else they become openly aggressive and destructive. The latter group makes up that large number of mentally ill youngsters commonly designated as juvenile delinquents. The other group is composed of those boys and girls who, hampered by childhood insecurities and confronted with standards that they were unable to meet, became emotionally disturbed and acquired the many somatic complaints seen in neurosis. They are very sensitive, apprehensive, uncertain, and immature. Few studies have been made of this neurotic group.

The following cases illustrate some of the complicated problems of the adolescent.

Maxine was a large, not especially attractive girl. She

A Psychology of Growth

was eighteen and a half years old when she left college at the end of her first year because she was not pledged to a sorority, had failed in two subjects, and barely passed two others. She complained that she could not sleep or study and that she had abdominal distress and, two or three times a month, colitis. These attacks, which lasted one or two days, occurred before examinations and at those times when the girl was invited to a sorority house. When she described her symptoms in detail, Maxine said that she "trembled inside." Her I.Q. was 130 and she had received high grades in secondary school, even though she was nervous.

This girl had been adopted at the age of two months. Her mother was quiet and unresponsive; her father, a preoccupied businessman, was critical of the child and caused her to be afraid of him. Both parents insisted, not altogether convincingly, that they had wanted a baby, but admitted that they had never been close to Maxine. She had heard her grandmother boast many times that it was she who had selected the baby. From the time that the girl was ten years old, therefore, she had been afraid that her parents did not love her. The mother was socially ambitious for Maxine and expected her to live up to high standards. She, however, felt that she was inferior and bad, although such was not the case and her parents were proud of her attainments in high school. During her adolescence she wanted independence but was afraid to assert herself until her last year in high school. Then, she said, she "nearly always lost the argument." When she was tempted to use her own judgment, she was afraid of being wrong and ended by following her mother's advice.

Maxine matured at the age of twelve. She liked boys and they were attracted to her, although she always felt that she was not good looking. She recognized sex wishes, but thought that they were bad and that a nice girl should not have them.

When she went to college, she was frightened and very insecure. She felt inferior to the sorority girls, was afraid that they would not like her and that, if they did accept her, she would not be able to make high enough grades for admission. Soon after her arrival she was befriended by an upperclassman who, she found later, was a homosexual. Since she had never before been permitted to make decisions, she was always afraid that she would do or say something wrong. In time, she was pledged to the sorority that was her third choice, but poor grades prevented her from joining. The serious problems in the mind of this insecure girl were enough to prevent her from studying properly or making an adjustment.

Other adolescent difficulties entered into the case of George who, at the age of nineteen, was discharged from the army as a neuropsychiatric. After one year in the service, he had forty-two charges against him and was referred to a psychiatrist.

Study of this problem showed that George's background included three years of military training in high school and a good academic record. When he entered the army, he was eager to make good and had high hopes for promotion. As months went by and promotions were not forthcoming, however, he developed an attitude of indifference. Although he never disobeyed orders, he was frequently late at formations, drilled in a slovenly manner, and failed to

A Psychology of Growth

follow individual assignments accurately or even to make an effort to do so. During this time he slept badly, lost weight, had crying spells, and became a problem in his command.

When the psychiatrist asked George for his own explanation of his trouble, he said that he presumed that he was frightened and "couldn't take it." What he meant was that the idea of war was in conflict with all his ideals. The thought of hurting or killing was repugnant to him and he felt that war was a terrible thing. In high school he had taken military training because he liked the uniform, and a wise drillmaster told him that he was one of his best students.

George was the older of two brothers. He had wet the bed up to the time he was five years old, but had presented no discipline problems at home or in school. His parents brought him up very carefully, stressing kindness and consideration for others, and he was always a good boy. He never stole, used bad words, or disobeyed; and when he reached adolescence he became very idealistic. He was fairly popular and did better than the average in sports.

In his own opinion, however, George was always inferior to other boys, owing, in part, to the fact that he was small. By following his friends' lead, never crying or fighting, he established a reputation for being amiable, a good sport, and a thoroughly nice boy; but inside he was seething with inferiority and resentment. Another element in the situation was George's fear of his father. Although he was never punished, he knew that he had to do as he was told and obeyed without question.

In the army, George's failure to win promotion had less

effect upon him than his reaction to the philosophy of war, which, he realized, was diametrically opposed to all the teachings of his childhood. His ideals were shattered and he became indifferent, frightened, and depressed.

George and Maxine are examples of adolescents who were able to succeed in high school, in spite of the conditions that later caused serious difficulties. Others break, during the high-school period, when they rebel, develop serious anxiety states, or fail completely, and often slip into that large group of boys and girls known as juvenile delinquents.

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Juvenile Delinquents

The term "juvenile delinquents" is applied to those youngsters who are in conflict with the law. The term is general and includes many types of problems. Many environmental conditions have been blamed for delinquency, usually on a basis of statistical findings. The greatest progress in understanding delinquency has come from the study of individual delinquents. These individuals are usually mentally ill. The important practical question is whether they can be cured by combined psychiatric and social treatment.

JUVENILE delinquency is a general term applied to pre-adolescent and adolescent boys and girls whose behavior is in conflict with the law and causes them to become court problems.

In the English-speaking countries the subject of juvenile delinquency had been investigated seriously since the early part of the seventeenth century. English investigators who wrote the "Report of the Committee for Investigating the Causes of the Alarming Increase of Juvenile Delinquency in the Metropolis" ¹ concluded that the principal causes were "the improper conduct of parents; the want of education; the want of suitable management; the violation of the Sabbath and habits of gambling in public streets."

The intervening years have brought many other investigations, but the majority of them, like the first one, have been statistical studies, from which it is always difficult to draw reliable conclusions. Some studies have convinced the investigators that juvenile delinquency is the result of environment; others, that it is due to an incurable constitutional condition, that is, a defect or defects in each individual delinquent from birth. These conclusions have been affected by the fact that most serious cases of juvenile delinquency that have come into court have not been treated successfully, and the offenders have had to be placed in custodial institutions. Like any condition in medicine that does not yield to treatment, this had evoked many diverse theories in regard to the cause and the method of management.

Many studies of large numbers of delinquents have refuted the old idea that juvenile delinquency was inherited. Spaulding and Healy's² study of several hundred cases in Chicago failed to produce any evidence to show that it was hereditary in nature, although they did conclude that some children inherited physical or mental traits that might, under special circumstances, become causative factors.

Goring³ claimed that mental retardation was more frequent in the criminal class than in the population as a whole; but he based his conclusions on physicians' clinical diagnoses, which are inaccurate. Using army intelligence tests, Murchinson⁴ and others have demonstrated that the intelligence of the prison population is as high as that of the general population. In other words, according to these figures, the percentage of persons of superior intelligence is as high in prisons as elsewhere and the percentage of

A Psychology of Growth

prisoners with low intelligence is no greater than in the general population. Italian criminologists attempted to prove that juvenile offenders were victims of abnormalities in the glands of internal secretion. Kretchmer⁵ and other Europeans tried to relate behavior to body build and physical types. Neither of these hypotheses, however, has been proved.

In most analyses of the environmental factors that might produce juvenile delinquency, the broken home is given first place. Shaw and McKay,⁶ who made one of the most careful studies, however, found that the ratio of broken homes among juvenile delinquents to that among other school children was 1.18 to 1. They concluded that delinquency was less closely related to the formal break in the home than to internal discord and conflict in the family; and most psychiatrists agree with this conclusion if parental rejection is added.

Investigators have made statistical studies of many other possible factors, such as sibling position (chronological position of the child in relation to brothers and sisters), undesirable persons living in the same house, companions, economic status of the family, religious influence, type of community, urban and rural differences, regional differences, inflation and depression, and many others. Although all these factors throw statistical light on the problem, no one and no combination of them can satisfactorily explain the cause of the behavior in individual cases. Two publications that give a detailed report on our present knowledge of these and other factors are "The Etiology of Delinquency and Criminal Behavior," by Walter C. Reckless,⁷ and "Young Offenders, An Enquiry into Juvenile

Delinquency," by A. M. Carr-Saunders, Hermann Mannheim, and E. C. Rhodes.⁸

When juvenile delinquency is regarded as the inability to make an adjustment to society, its seriousness is relative. For example, in many neighborhoods, stealing and truancy are normal. There the boy who steals enjoys the respect of his fellows, while the lad who never breaks the law is the one who becomes *déclassé*. If extensive stealing is the custom of the neighborhood, the average boy will steal, since the desire to do so, which is normal in all children, is now augmented by the natural reluctance of a young person to defy custom and behave in a manner that sets him apart from others. Some children, too, are very susceptible to the influence of vicious or criminal elements in the home or the neighborhood. The effects of suggestion and social pressure are shown by the fact that most delinquents do not work alone. The greatest number of delinquents may be found in the areas showing the greatest disorganization; that is, neighborhoods where there are industrial plants, condemned buildings, a declining population. This does not mean, however, that the environment per se is the cause of the delinquencies. Individuals who live in these areas are less capable of rearing children successfully and, therefore, their boys and girls are more likely to encounter difficulties.

The first careful studies of individual cases of juvenile delinquency were begun by Dr. William Healy when he organized the Juvenile Psychopathic Institute in Chicago in 1908. Since that time a large number of child-guidance clinics and independent psychiatrists have studied the individual delinquent.

Study of individual cases shows first of all that "delin-

A Psychology of Growth

quency" is a very general term—one that includes many different forms of behavior. There are mentally retarded, psychopathic, and sex delinquents; individuals whose actions are due to compulsive behavior, to encephalitis, or other forms of brain disease; and numerous other types of delinquents. Persons who have studied individual cases have generally concluded that they cannot be explained by general theories.

Work with juvenile delinquents indicates that these are youngsters who are emotionally disturbed. The primary causes of their delinquency are their reactions to the stresses and strains in their own minds, and these may be generated anywhere—in the city or in the country, on the boulevards or in the slums, where discipline is strict or where it is lax, in homes that have a strong church affiliation or in those that have none at all. These and other general social factors do not in themselves account for desirable or deplorable behavior of any kind, and juvenile delinquency is no exception.

When we find a youth defying his parents and the laws of his community to the point of committing acts that he knows are prohibited, we are dealing with desperate behavior, which must be motivated by serious emotional difficulties. In his aggressive behavior the boy is expressing some inner driving force that he himself neither understands nor finds himself able to control.

For example, there was Edward, a fifteen-year-old boy who was arrested for exposing himself to girls. He came from a fine family in a good community and had been carefully brought up, as that expression is generally understood. He was unable to give any reason for his behavior. He not

only asserted that he had no interest in sex but also that he believed sex wishes were wrong and that he attempted desperately to force all such ideas out of his mind. This extreme effort to dismiss normal feelings, which were physiological in character and instinctive in nature, caused him to develop a compulsion to the point where he could not help exposing himself. Questioning revealed that this boy had failed to receive intelligent sex instructions, but had been taught all his life that everything about the subject was wicked. With intelligent sex education and consequent relief from impossible standards, his compulsion disappeared.

Seventeen-year-old Irene was charged with sex delinquencies, which had been continuing for a year. She was an only child, who had been adopted at the age of nine months. Her parents, like those of the boy in the previous case, were fine people who lived in a good neighborhood. However, they had many disagreements, in the course of which they used the child as a football. As she never knew whether or not she was approved, she felt very insecure. At about the age of ten, she became something of a social outcast. She had very few friends among girls of her own age and said that she preferred older women. Actually she was very dependent upon her mother but, because she was not sure of her position in the family, she was searching for a good mother substitute. The girl's parents brought her up very strictly and, on the subject of sex, she was more frightened than enlightened. She described spells when she had very strong sex wishes accompanied by an overwhelming sense of loneliness. At those times she felt that she had to get out of the house and

A Psychology of Growth

would go off with the first boy she met on the street. After each episode she experienced an extreme sense of guilt and felt that she should be severely punished.

In these two examples we find a boy and a girl whose homes, parents, and environment as a whole would generally be classed as very desirable. Nevertheless, they developed compulsive behavior that led both young people to the juvenile court. Superficially their behavior might appear to be very immature, the result of a lack of self-restraint; or they might be described as indifferent to the rules of society. A study of the two children, however, disproves both of these explanations. They were not immature or indifferent and each had a conscience—a more active conscience, in fact, than that of the average individual; but internal strife was strong enough to break down these barriers. What happened to them was as inevitable as the result, say, of sealing the top and nozzle of a teakettle filled with water and starting a fire under it. Steam that cannot escape through normal channels must break through some other way.

Both Edward and Irene were cured by psychotherapy. This treatment is not always effective, however, even when it is continued over a considerable period of time. In such a case, the patient has to be placed in an institution.

Leonard, a sixteen-year-old delinquent, was arrested for burglary after he had broken into a store, a school, and a residence. Each time, he had stolen articles that he did not especially want. In the last two places he had left behind letters full of criticism, through which he was traced and discovered to be the thief. This boy was the oldest of four children. His father, who had been a prob-

lem in high school, had once been arrested for stealing a bicycle. After his marriage, the father had become industrious but not notably successful. He worked long hours, came home irritable, and gave his family little consideration. Leonard was always afraid of him. Though the boy's mother took the attitude that she had made her bed and would continue to lie in it, she resented her husband's lack of consideration and attention. Sometimes she vented her displeasure on Leonard, who resembled his father. Normally, however, she showed affection for her children and Leonard reciprocated.

During his childhood the boy presented no special problems except that he wet the bed until he was five years old and never got along very well with other children. His serious problems arose during adolescence. At that time, he felt inferior to other boys and attributed this to his small stature. Although he wanted his mother's love and experienced sex wishes directed toward her, he was embarrassed by her demonstrations of affection and felt disturbed afterward. At the age of fifteen, he began to have homosexual relations, which disturbed him greatly and caused him to feel worthless. His schoolwork suffered and his teachers criticized him for his inattention and what they called his indifference.

Among the many adolescent problems behind Leonard's behavior one of the most significant was his intense sense of guilt. He felt that he was very bad and wanted to be punished. In his burglaries he not only expressed resentment but, by writing letters that would inevitably point to him as the thief, he made sure that he would be caught. In other words, he did not want the articles he stole but, by

A Psychology of Growth

accepting censure and punishment for burglary, he obtained relief from the sense of guilt that resulted from homosexuality and his feeling toward his mother. Psychiatrists who have analyzed many cases of juvenile delinquency have usually traced misconduct to emotional distress. Why some individuals react with the aggressive behavior of the delinquent, while others become sensitive and shut in, is a question that has not been fully explained. In many cases, the boys and girls reflect the patterns that we noted in the newborn infants; that is, some respond to insult by a passive behavior, while others make violent outbursts. No definite conclusion is warranted on the basis of the few cases that have been analyzed from this point of view, but it suggests a possible theory. Unquestionably the delinquent is very often a child who was rejected from the time of birth and was faced with impossible standards. He has resentments and often appears to be indifferent. Usually he has an intense sense of guilt. His emotional growth has been distorted. He is ill and requires careful medical (psychiatric) care.

Delinquents whose behavior does not bring them into court are frequently sent to military school. Court cases that do not yield to psychiatric or social treatment lead to the reform school. Authorities recognize, however, that these institutions do not cure the condition. Obviously, discipline cannot correct behavior due to emotional conflicts over which the individual has no control. The reform school is only a step on the path that leads to the penitentiary. Much more efficacious treatment is afforded by placing the delinquent in a boarding home and giving him

psychiatric care. In this way the youth is removed from the environment where his difficulties arose and has the benefit of treatment by a skilled, trained worker, who is often able to give him new emotional outlets and to help him form interests that enable him to relieve his anxieties.

Another group of adolescents whose plight is equally serious from a medical point of view has received far less attention than the juvenile delinquent. It is made up of those whose emotional conflicts form anxieties to which they respond by becoming shut in and by developing neurotic complaints.

Frank belonged to this group. When he was examined at the age of seventeen, he was a junior in high school doing passing work. He did not enter into the social program of the school, had no friends, and spent much time listening to the radio or aimlessly wandering around town. At home he said little and was irritated when his parents attempted to talk to him or when they urged him to attend social events. He complained of vague headaches, for which no physical basis could be found.

Like the majority of such patients, Frank was not very communicative with the physician at first and usually asserted that there was nothing wrong with him. As the physician won his confidence, however, he described strong feelings of inferiority and inadequacy and the fear that he experienced when he had to talk to anyone or when he was called upon to recite in school. He felt that he was not liked and finally concluded that no one had ever liked him. He displayed some interest in mechanics and had considerable aptitude; his father was helpful in encouraging

A Psychology of Growth

him to set up a workshop at home. During his senior year, when he had this added interest, he worked hard and gained admission to an engineering school.

Although he was now able to discuss many problems and to gain an insight into his difficulties, he still kept apart from others after he entered college. In his second year he formed a few friendships and had dates with girls, but on those occasions he was so nervous that, he said, "my hands shook if I even tried to drink a coke." However, he was determined to understand his fears and was able to make appreciable progress.

During his two years in the army, Frank did fairly well. He was still unsure of himself and became boastful and egocentric, in an effort to compensate for his feeling of inferiority. It is significant that he did not develop battle fatigue. He readily admitted that in conflict he knew extreme fear and trembled so greatly that he had difficulty in performing the operations assigned to him. When he was injured, he experienced a feeling of great relief at the prospect of being relieved of further duty. Probably the reason why he did not develop battle fatigue was that he had a considerable insight into the origin of his fears and realized that there were many other soldiers as frightened as he was.

After five years of intermittent treatment, he has become outwardly a sociable, friendly individual, but his mind is not at ease. He still feels that he is not liked, although he knows that this is not true. His present pattern of behavior will probably follow him through life. If he continues to be successful, he will build up more self-confidence; if he fails, he will become more uncomfortable.

Reactions such as Frank's, which are not uncommon

among boys, appear still more frequently in girls. They account for that large group of high-school girls and women who are nervous. The anxieties that often give rise to somatic complaints, such as abdominal distress, colitis, rapid heart, and weakness are due to the insecurity, resentment, fear, and sense of guilt that have been present from birth. These produce fixed habits of response during adolescence and finally bring about the suppressed and exhausting anxieties of adulthood.

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Adults

An adult is an individual who can meet new and difficult situations in life and make an adjustment to them. At this point it is well to review growth and development from birth. Adults like to work but also go back to their childhood for a certain amount of play. All adults have rational fears and hates; also irrational fears and irrational hates. Adults desire to rear a family, to work, and to create. Many symptoms are produced by the effect of intense feelings upon the physiological processes via the sympathetic nervous system.

Neurosis is an exaggeration of normal emotions. Neurotic individuals are controlled by their unconscious anxieties: fears, hates, sense of guilt. They are unable to grow up and act like adults. To them everything is terrible. There is no line of deviation between the normal and the neurotic individual. Anyone may "break" if conditions are too difficult.

"Psychopathic personality" is the name given to the state of a group of immature individuals who have little or no sense of right and wrong. These individuals are often troublesome.

An alcoholic is an individual who cannot stop drinking, after he has had one or two drinks, until he makes himself completely dependent. Some individuals develop obsessions

A Psychology of Growth

that they recognize as irrational but are still unable to control. This behavior often becomes compulsive.

Sexual impulses may be distorted. Exhibitionism, sadism, fetishism, and so on, are examples. In these individuals there is a suppression of normal sex wishes and such distortion of sex impulses that they no longer have the biological function of propagation.

Psychoses are forms of mental illness in which the patients lose contact with reality. The manic-depressive condition and dementia praecox are the most serious forms of mental illness.

ADULTHOOD may be defined in many ways, but from the point of view of this study we might describe an adult as an individual who has grown up and so fitted himself for life that he can adjust to new and difficult situations. When misfortune comes, he can take it in stride. This standard, to be sure, is purely relative, since there is no person who may not become emotionally disturbed and "break" if his difficulties become sufficiently serious. Some individuals, however, have a lower breaking point than others.

In order to understand these differences, let us look back at the steps in the development of an adult. Each individual is one infinitesimal unit in the life of all mankind. Since he is only a link in a very long chain, a living replica of his ancestors for countless generations, he is ancient even at the moment of birth. His life, like that of every other living thing, is a growth process. This process begins with conception and continues to senility. Growth is most rapid before birth, but follows at a swift pace through

infancy and accelerates again during adolescence. It may proceed continuously or it may be interrupted, either before or after birth, by toxic or poisonous agents or disease. It may also continue for a time and then reverse itself, as in the deteriorating diseases. After birth, suitable environment may encourage growth; unsuitable environment may arrest or stunt it or cause regression. Growth is stimulated by growth energy—that is, vitality—with which the individual is endowed from the time of conception. The amount of growth energy varies with the individual.

Everyone is born with potentialities for the development of growth patterns that determine his physical stature, intellectual capacity, and emotional responses. He may also have certain inherent abilities and handicaps. Environment will affect these elements to some degree but will not change them. Growth occurs in a definite, orderly sequence, which varies among individuals only in regard to rate and extent. In other words, each individual follows a universal sequence of growth changes, but does so at his own rate of speed and can attain only the size and capabilities inherent in himself.

A normal infant has at birth a well-developed and functioning mechanism that regulates vegetative, physiologic, and metabolic processes and emotional responses. He has his own rhythmic pattern of sleeping, waking, and desiring food. The type and degree of his emotional response, which we call temperament, is also individual. He responds in terms of satisfaction and complacency or of fear and hate.

The newborn infant is completely dependent and his behavior is controlled by his feelings. Yet from the moment

A Psychology of Growth

of birth he must meet the biological demands of his growing organism and the requirements of a complicated society. As his central nervous system develops and he gains experience, he begins to learn how to meet various situations and with frequent repetition his responses become habits. Growth and learning come from within the individual and the learning process is lifelong.

Every infant has certain fundamental physical, intellectual, and emotional needs, which his environment must supply if he is to attain maximum growth. When his needs are satisfied, he gains self-confidence, which makes for constructive aggression and enables him to learn about himself and his world. As he grows older he forms habits of responsibility, becomes independent, self-reliant, and able to cope with the inevitable problems that arise in human society.

The child's mental needs are (1) security, which comes from the assurance that he is wanted and accepted as he is; (2) opportunity to grow up naturally at his own pace—that is, freedom from standards inappropriate to his age and capacity. In this regard, the most important environmental factor is the attitude of the child's parents. His security or insecurity will be based on the fact that his parents love him wholeheartedly or with reservations, or actually hate him; on their ability or failure to make him feel that everything is all right and that he is acceptable to them, or by their tendency to see in him problems that are in their own minds. His second need will or will not be supplied, depending upon whether the parents establish standards to which the child is capable of measuring up or whether, because of their own prejudices, insecurities,

fatigue, or lack of knowledge, they demand too great achievement; whether they help him to feel useful or thwart his efforts through overprotection or underprotection. When the environment places too many difficulties in the way of the individual, his growth is stunted or distorted or he regresses to a less mature level at which he feels more comfortable. Thus the child whose needs have been supplied is able to meet adversity with confidence and to make an adjustment. On the other hand, the insecure and thwarted child or adult lacks self-confidence and reacts with either overcompliance or overdefiance.

In the course of the baby's first two or three years, he is interested primarily in his own physiologic processes and in learning to use his body. He begins to walk, talk, and coordinate his eyes and hands while walking and running. Next he becomes curious about concrete objects and about his surroundings. All his investigations are fun; these learning processes are pure play.

During childhood, the boy and the girl are most interested in their developing bodies and their newly acquired freedom after the dependence of infancy. They want to learn and they want to do things, but they are selfish and self-centered. Unlike the infant, who is impatient and must have his wants satisfied immediately, the child can wait a short time (though not without difficulty) for the fulfillment of his wishes. Since he does not have to take care of himself, his activities are still of a playful nature. Maturation, however, causes him to feel that he is grown up and needs a place in society. For that reason his learning processes are directed toward a vocation.

In order to have mental health, it is not necessary for the

A Psychology of Growth

individual to reach any peak of perfection, but only to realize his own potentialities, however limited these may be, and to have acquired the ability to make necessary adjustments. An adult who is well mentally works and plays, laughs and cries, loves and hates, experiences fear and self-confidence, does some things with ease, does others with difficulty, but above all is possessed of sufficient self-confidence and understanding of himself, enough habits of responsibility to stand on his own feet and meet new situations without breaking down.

It is the rate of change rather than the change itself that determines the ease with which an individual can make an adjustment; the more rapid the changes, the greater the problem of adjustment. Because of the rapid social and economic changes that have occurred in the past fifty years this period has presented an unusual test for mental health.

Adulthood is a continuation of the growth process. Physically, the maximum growth is usually reached within the first twenty to twenty-two years; the maximum intellectual capacity, which is determined by the individual's maximum mental age, is usually acquired when he is between the chronological ages of thirteen and twenty-two. However, mental growth as a whole (this includes emotional development) can continue until an individual reaches senility; that is, until his brain begins to deteriorate from inadequate blood supply or for other reasons. This prolonged mental growth depends upon the ability of the person to learn to profit by mistakes and continue to develop self-confidence and skill in solving the problems that life presents. The sum of the habits of response that he has been forming since birth make up his personality.

These responses are affected (1) by the amount of vitality, the potentialities, and traits with which he was born; and (2) by environment. The individual's inborn and unchangeable characteristics are strength, general intelligence, special abilities (such as aptitude for music or art), motor coordination (which gives rise to mechanical skill), alertness and speed of response, and special defects (for example, weakness, clumsiness, limited intelligence, total or partial tone deafness, and poor visual memory, which causes reading difficulties). In addition, his responses normally include both justifiable and irrational fears and hates. The latter are emotions that are not warranted by the occasion that arouses them, as is illustrated by the person who always fears the worst and the one who, in addition, has a temper tantrum when he does not get his own way. Environment has the effect of stunting or furthering growth; it determines the individual's confidence or anxiety, prejudices, beliefs, and general philosophy of life. By the time he has reached adulthood, the effects of these influences have so crystalized into personality patterns that his reactions to situations have become readily predictable. In other words, although adults like to think that their behavior is reasonable and logical, it is actually controlled by these well-developed patterns without reference to reason or insight. When these trends are guided by irrational fears and resentments, they form the basis for typical neurotic behavior.

No adult grows up so completely that he does not go back to childhood and enjoy a certain amount of play, such as golf, tennis, or card games. These activities and other diversions are nonetheless beneficial because they are play;

A Psychology of Growth

since they provide rest and relaxation, they are valuable from the standpoint of health. Similarly, motion pictures, prize fights, and other recreations provide outlets for pent-up resentments and unsatisfied wish fulfillments and thus improve mental health. Some persons need these activities more than others. The individual who has no athletic ability derives pleasure from the success of one player or team of which he has become a partisan; the individual who cannot fight releases a great deal of resentment when his favorite beats an opponent. Anyone can identify him- or herself with the hero or heroine of a play and find satisfaction in watching the story unfold on the screen. Proof that there is a need for these emotional outlets is amply furnished by million-dollar prize fights and the extent of the motion-picture industry.

Other characteristics of the adult are his desire to rear a family and to work and create. Incidentally, his work may benefit others as well as himself. The fact that he does it for his personal satisfaction, however, does not detract from his usefulness and value to society.

Although some adults work with satisfaction and complacency most of the time, all have certain illogical subconscious prejudices, which influence their judgment. For example, a very good businessman who hired many girls did not realize until it was pointed out to him that his selection was greatly affected by his predilection for red hair. Another man was prejudiced against girls who used lipstick because his mother, to whom he was very much attached, had never rouged her lips. People frequently judge others on the basis of a single characteristic. An individual who does not like obesity will consider a fat

woman very inferior, regardless of her other characteristics. The president of one corporation distrusted any person who did not look him straight in the eye while they were talking together. A very intelligent woman who learned that for years her husband had been unfaithful was worried only because he lied to her about minor details when he made his confession. All adults, even those who have mental health, possess ideas of this kind. They represent unconscious childhood impressions that continue to exert their influence during adult life.

Sally, who was very well liked, incited ten associates to give up their jobs because of the conduct of a foreman who had reprimanded her. Analysis of the situation showed that the trouble began when one girl employee drew pictures of a fat and a thin cat and wrote Sally's name under the former. Sally, an extremely sensitive girl who was particularly disturbed about her obesity, became very angry and made many complaints about the girl who drew the pictures, ending with a demand that the foreman discharge her. He had found this girl to be a very efficient worker and, having no knowledge of the reasons underlying Sally's demand, he not only refused to do what she asked but also charged her with being a troublemaker. Sally, in turn, persuaded her friends to quit. When the nature of the trouble was made clear to all concerned, ruffled feelings were soothed and everybody went back to work. This incident illustrates the manner in which group behavior can be influenced by one individual's sensitiveness about himself. It shows the necessity for supervisors, whether they are foremen, nurses, or others, to look for the attitudes, either logical or illogical, that influence behavior.

A Psychology of Growth

All adult minds are furnished not only with attitudes but also with various convictions and, possibly, superstitions. The convictions, which may be religious, political, or social in nature, are usually unconscious attempts to satisfy childhood anxieties remaining in the adult mind or to justify ideas that the individual received as a child but was unable to understand. Superstitions are beliefs that control the individual's behavior even though he cannot explain them logically.

Thus the child is indeed father of the man. From him the man inherits all the resentments, anxieties, and ways of responding that he acquired in his early years. The adult represses his unpleasant experiences—that is, forces them out of his consciousness—but they remain in his unconscious mind and influence his feelings and actions even to the extent of causing him to behave in a manner contrary to the dictates of his conscious mind. This is shown, for instance, in the conduct of a person who finds it difficult or impossible to do certain things because he is frightened, even though he knows that there is no danger. Another example is the behavior of the individual who loses his temper, in spite of the fact that he realizes that his anger is illogical and will keep him from accomplishing what he most wants to do.

The effect of emotions upon physiological processes and the relationship of these influences on disease processes makes up psychosomatic medicine.

As has been pointed out by physiologists, notably Cannon,¹ emotions are expressed along the neurons of the autonomic nervous system. The cranial autonomies normally control digestion, heart, sex, and other organs and

functions of the body. Where there is pain, fear, or rage, however, the sympathetics take over and drastic changes in function of the organs take place. Notably gastric and sex functions are markedly suppressed and there is a discharge of adrenin and an increase in blood sugar. When adrenin is injected in both normal and abnormal individuals, there is precordial and epigastric palpitation, diffuse arterial throbbing, oppression in the chest, trembling, chilliness, dryness of the mouth, fear, malaise, and weakness. The heart beats more rapidly, arterioles are contracted, bronchioles are dilated, and blood pressure is raised. These changes are explained upon an evolutionary basis as preparation of the animal for fighting defense.

At least one writer, Klemperer, points out the importance of spasm of the coronary vessels in coronary disease. He feels that this spasm produces localized anemia of the muscle and weakening of the wall of the blood vessel, so that small hemorrhages occur from which inflammatory processes develop. All cardiologists feel that intense emotions are a factor in coronary disease. For detailed discussions of this important factor read "Emotion and Bodily Changes" by Flanders H. Dunbar.² Internists agree that the effects of intense emotions are a factor in gastric ulcer.

These physiological reactions to intense emotions are present in both normal and abnormal individuals. Those who have intense irrational emotions are affected to a proportionally greater degree. In many patients the symptoms from these physiological reactions are sufficient to cause illness without organic disease. Gastric disturbances, some forms of colitis, and cardiac neurosis are common examples.

When fears and resentments dominate an individual's

A Psychology of Growth

personality and prevent him from gaining sufficient satisfaction in life, he is said to be "nervous" or neurotic. Because his childhood and his environment were never solved, he is constantly impelled to indulge in behavior that gives him a needed satisfaction. He experiences the same feelings that he had during his childhood, and when difficult situations confront him he reacts in terms of youthful fears, resentments, and a sense of guilt. Unable to assume the role of a self-reliant adult, he goes back to an earlier, more dependent status. This process is known as regression. Mental ill-health, then, is a return to an immature level of growth. It varies from the temporary and partial to the complete return to childhood; that is, from the milder forms of neurosis to the vegetative state that appears in the end stages of dementia praecox. Neurotics make up the largest group of those persons who are mentally ill.

Neuroses often begin with lack of parental approval at birth. Frequently this attitude is coupled with the imposition of standards too high for the child to meet. Consequently, he becomes frightened and resentful of his own parents. As he grows up and his conscience develops, he is oppressed by a strong sense of inferiority. He resents his lot and is frightened of his own thoughts and feelings. The observer sees him as a person who complains a great deal, exaggerates symptoms of illness, and has temper tantrums. Even though he recognizes that his behavior is often illogical, he cannot alter it because he is impelled by fears over which he has no control.

It is not necessary to go far to find an example of the neurotic who lives in his childhood and is governed by early anxieties. There was Mr. A, for example, a capable busi-

nessman who was always afraid in the dark. Analysis of his fear revealed that it had originated in his childhood, at which time he had been very much afraid of his father. When he was in a dark room he imagined that a man was going to hit him. In describing this assailant, he said the man was "my father with whiskers like the devil's." Mr. A was frightened, also, when he was interviewing clients. If someone disagreed with him, he experienced the same sensations that he had known when his father struck him and said, "What the hell is the matter with you?" In a recurring dream, which had begun in his childhood, he was falling from a high point in a tall building and his father was looking at him from a window of each floor that he passed.

A student nurse, who had been doing very good work, began to have great difficulty in her classes when a resident physician, for some reason, got into the habit of baiting her. As a child she had been subjected to much criticism by her parents and had come to the point where she was always afraid that she might make a mistake. When criticism was unjust, she became so disturbed that her work suffered, until finally she had difficulty in speaking and began to show other forms of infantile behavior.

Conscious or semiconscious fears and anxieties frequently produce somatic symptoms, such as abdominal distress, choking spells, rapid heart, and others. These symptoms, in turn, frighten the sufferer still more, and he thinks, in panic, that he has cancer, heart disease, or some other ailment of which he is going to die. It should be borne in mind that such symptoms are very real to the patient and should not be ridiculed or laughed off as pure imagination. The patient is extremely uncomfortable and no less ill

A Psychology of Growth

than one who has some organic disease. He is as badly in need of medical—in this case, psychiatric—treatment as any sick person.

There is no sharp line separating the mentally well individual from the neurotic. All persons have some illogical or irrational emotions. It is when those emotions control the individual's behavior that he is considered neurotic and even this criterion is not absolute. In general, the neurotic is the person in whom the mental qualities of the normal individual are exaggerated and who over-responds to circumstances.

Of all forms of mental ill-health, neurosis is the most amenable to psychiatric help. The first step consists in letting the patient know that he cannot help being what he is or doing what he does. In that case he need not feel ashamed of his fears and hates or guilty because of them. Neither should he worry about somatic symptoms that are not organic but the product of his fears. Since it is harmful for the patient to repress his emotional problems, the next step in his treatment is an examination of his fears, hates, and sense of guilt, with a view to discovering their origin. As the child, cowering in the dark, throws off his fears when someone turns on the light and shows him that the supposed burglar was only a flapping window shade, so the neurotic is freed of many fears when he is helped to see that his anxiety is a relic of his childhood with no current validity. If his present uncertainty is due to an old fear of his father, for example, and he realizes that when he is governed by this fear he is simply continuing to live in his childhood, he is better able to analyze and improve his present situation.

Other irrational anxieties and resentments likewise become less disturbing when the patient understands that they are reactions that were conditioned by childhood insecurities. We have seen that fear of hate is one of the serious anxieties in the mind of the neurotic. It can be diminished when he finds out that he cannot help hating one person or another and that neither love nor hate is 100 per cent pure, but that both may be evoked simultaneously by one individual. The neurotic may lose his intense sense of guilt if he can be made to understand that he loved his father or his mother or some other close relative at the same time that he hated this person, but that his love was probably stronger than his hatred.

In caring for a neurotic it is helpful for the nurse, who should first understand herself, to avoid putting a personal construction upon the patient's resentments and complaints. The ill temper that he vents on her or the hospital is probably only an expression of his fear. Irrational fears, which are present in the mind of every patient, are more pronounced in the neurotic than in the normal person and more common in the hospital than in any other place. Furthermore, it is safe to assume that the patient, particularly the one who is going to have an operation, is afraid of dying. The hospital routine is probably unfamiliar and the patient may have difficulty in adjusting to it. A bed patient is especially sensitive about exposing himself, using bedpans, and operation gowns, and undergoing various forms of treatment. The skilled nurse is sympathetic, whatever the patient's behavior. She does not side either with the hospital or with the patient, but makes him feel that she understands his attitude. She shows an interest

A Psychology of Growth

in him and solicitude for his feelings as well as his welfare. This she can do only if she is objective and does not permit her personality difficulties to affect her point of view.

It usually relieves a patient to be able to talk about his problems. The nurse cannot solve them, but she can do good by listening sympathetically. In fact, that nurse helps most who listens most. She does not help her patient by discussing other patients or her own problems.

PSYCHOPATHIC PERSONALITY

When we use the terms "constitutional psychopathic state," "emotional insufficiency," "psychopathic personality," "moral imbecility," and "moral insanity," we have in mind one troublesome and often unapproachable group of individuals. The person who falls into this category is one who knows the difference between right and wrong but is unable to act accordingly. He attempts to reach his own goals with no consideration for others and with complete indifference to the regulations of society. He may ignore all sensible plans and intentions, become a truant or a periodic drinker, and develop a tendency to reckless spending. Like a child who cannot wait for the fulfillment of his wishes, the psychopath must have what he wants at once, no matter what the cost. Because of his childish impulsiveness, he usually fails to achieve his purposes, and this frustration makes him still more aggressive and indifferent to social codes. He will become pathological in his lying, try violent avenues of escape, and develop ideas of persecution. Being unable to meet social demands, he may attempt to change society and become an agitator or a

fanatic. If he has qualities of leadership, he may carry others along into antisocial endeavors.

This individual's behavior is not due to lack of intelligence but to insufficient emotional growth. He may have good ideas, converse well, be good-natured, sociable, and cheerful. As a rule, he is also vain and arrogant and conveys the impression that he has a high opinion of his own ability and is sure of himself. At other times, however, he is morose, irritable, and defiant, and has temper outbursts. He never admits that he is wrong.

The psychopath, then, is an individual who has been unable to grow up and take on responsibility for his behavior. His irrational actions can best be explained by comparison with the impulsive, insecure, frustrated child. Both feel that they are not approved but cannot understand the reason for their unhappiness. They therefore try to prove that they are indifferent and find their only satisfaction in retaliating for their injuries by causing trouble. The psychopath's behavior is immature and compulsive.

ALCOHOLISM

Alcoholism may be associated with a neurotic, psychopathic personality or with other forms of mental ill-health. It is compulsive behavior and may be regarded as a symptom of regression toward infancy. This is shown by the fact that, after taking one or two drinks, the alcoholic is unable to stop until he is completely drunk, at which time, like the infant, he is absolutely dependent and needs to have someone take care of him. The case histories of alcoholics commonly include extremely severe fathers and mothers who were prone to overprotect their children.

A Psychology of Growth

A typical case was presented by John, who, at the age of twenty-one, was examined by a physician because of alcoholism of two years' duration. This young man described alcoholism very well in reply to the question of what he would do with a given amount of money if permitted to spend it at will. His answer was that he would go down town and decide to have one drink. After he had taken one, he would be unable to stop drinking until he had spent all his money except the sum that he habitually paid a taxi driver to take him home. The next day he would wake up in bed with his mother sitting beside him. From past experience, John knew that he would have no recollection of saving the necessary money or hiring the cab, and that he would have no interest in anyone during the time he was intoxicated. Here was a patient, therefore, who felt compelled to drink, disclaimed any understanding of his behavior or memory of his actions while drunk, hired someone to take him to his mother, and depended upon her to care for him as she had done when he was an infant.

John's father was an efficient businessman, who employed ruthless methods in his commercial affairs and carried them into his home. He was a stern disciplinarian and never supplied the boy with anything except what would meet his purely material needs. The mother, feeling that her husband was too severe, overindulged the boy and protected him from his father. As a result, John had never been able to behave consistently like an adult; periodically he had to go back to his infancy.

OBSESSION AND COMPULSION

Some individuals develop obsessions, which they recognize as irrational but are still unable to control. There

was a young woman, for example, who had the idea that she would kill her baby; another who was sure that she would scream and run out into the street naked; and a man who was convinced that he would insult women. These persons were actually very conservative and their behavior was most considerate and proper. Obsessions represent the opposite of actual behavior.

In time, however, persons who have such obsessions often develop compulsive behavior. This is illustrated by the conduct of a man whose obsession was the fear of harming someone. At night he took two hours to assure himself that everything was safe in his household. He locked the doors and windows, then went back repeatedly to make sure that they were secure. He also slammed the refrigerator door and closed the matchbox again and again, tried the faucets fifty to a hundred times, used blotting paper to test them for leaks, and felt the bottom of the sink and the lavatory, to be certain that they were dry. During this procedure, he perspired heavily and criticized himself for his foolish behavior.

This man was very quiet, considerate, and honest. For twelve years he had punched the time clock daily at exactly eleven minutes before he was due on the job. He was a perfectionist and always did far more work than was required of him. Inquiry revealed, however, that this behavior was diametrically opposed to his underlying feelings toward people. As a child, he had undergone great hardships. After the death of his mother when he was three years old, his alcoholic father had beaten and otherwise abused him. As a result of these experiences, he had grown up feeling intense resentment.

A Psychology of Growth

SEXUAL ABERRATIONS

Sexual impulses may be distorted in many different ways. Exhibitionism, as we have seen, is one form of distortion. Others are sadism, the wish to give the partner pain; and masochism, the wish to be hurt. Some individuals cannot accept certain forms of affection unless they are accompanied by pain. A sixteen-year-old girl, for example, did not enjoy being kissed unless, at the same time, the man stamped on her feet or kicked her legs. One young woman could not accept sex relations unless her husband slapped her, as if he were forcing her to submit to him. Some persons derive sexual satisfaction from seeing others naked or from watching them have sexual intercourse. Sex impulses may be directed toward others of the same sex (homosexuality) or be satisfied by the use of the mouth (sex perversion). Other aberrations are paedophilia, zoophilia, and fetishism—that is, sexual desire directed, respectively, toward small children, toward animals, or toward parts of the body or articles of clothing. Paedophilia combined with sadism is illustrated by the case of a fifteen-year-old boy who got satisfaction from undressing a small girl and hitting her over the head with a switch. Fetishism was exemplified by an eighteen-year-old boy who felt sexual excitement when he saw a man wearing suspenders. In cases of sexual aberration, there is a suppression of normal sex wishes and such distortion of sex impulses that they no longer have the biological function of propagation.

MANIC-DEPRESSIVE

A person is said to be psychotic when he develops irrational behavior to the point where he no longer has control

of his actions or insight into them and, therefore, completely loses contact with his environment. The two most common functional psychoses—that is, those which have no organic basis—are the manic-depressive type and schizophrenia, or dementia praecox.

The manic individual throws off all self-restraint. He is extremely restless, talks incessantly without inhibition, and continues this way for days, until he reaches the point of exhaustion. At other times, he may have periods of depression, when his conscience troubles him; he feels that he is bad and worthless and ought to kill himself. Some depressed patients are overwhelmed by anxiety and a sense of guilt and go into a panic. They are emotionally ill, their ideas about themselves are irrational, and they attribute their condition to minor misfortunes or unpleasant situations. One such man blamed the OPA for his serious depression; another associated his condition with the purchase of an unsatisfactory used car; and a woman thought that her trouble was due to her sister's refusal to believe certain facts about their father.

PARANOID INDIVIDUALS

The paranoid individual is one who has an irrational conviction that others are trying to harm him. His delusions are wholly without foundation in fact and represent only distorted ideas in his own mind. His suspicions may take the form of a conviction that someone is trying to poison him, to take away his money, or to injure him socially. One man conceived the idea that a newspaper advertisement was attacking his character. He burned the paper and refused for weeks to look at another. Such an individual may also have exaggerated ideas about himself and

A Psychology of Growth

come to believe that he is Napoleon or Caesar or some other famous person in history.

Paranoiacs feel that they were treated unfairly when they were growing up, and this may be true. They are often the black sheep of their families. As such, they were disliked and discriminated against in the home. Convinced that they were not getting a square deal, they became negativistic and were subjected to even more criticism. Thus they developed strong feelings of inferiority and, at the same time, came to believe that others were taking advantage of them. The conviction that they are very superior is compensation for their feelings of inferiority and inadequacy.

The true paranoiac remains alert and troublesome throughout his life. Those who deteriorate mentally are suffering from paranoid praecox. They slowly lose interest in other people, grow slovenly in appearance, and show little concern about their surroundings. This process covers a period of many years.

DEMENTIA PRAECOX (SCHIZOPHRENIA)

The most serious mental illness is dementia praecox. The patient develops unsystematized delusions and the most bizarre hallucinations (false perceptions), which seem to have no basis in fact or logic. He completely loses contact with his environment and lives in a dream world, in which his personality disintegrates and his behavior becomes entirely abnormal.

As a rule, this illness takes definite form in adolescence. Study of early cases has provided some information regarding the origin of the disorder. In the beginning, a patient

may explain that his mind is in two parts. One part, for example, says "Be good," while the other part says "Be bad." Later the patient may resolve this conflict by hearing voices that tell him what to do, or he may imagine that someone is pursuing him. These hallucinations and delusions may force him to try to escape, and he will then become a tramp and go from one place to another. Absorbed in his mental aberrations, he rapidly loses interest in his surroundings and a slow but inexorable deterioration sets in.

The group of dementia-*praecox* patients known as catatonic is characterized by extreme negativism. For example, an individual will refuse to change his position and, holding his muscles rigid, will resist every effort to move him. When he is told to do one thing, he is inclined to do the opposite. Such patients usually have catatonic episodes and are more cooperative between attacks.

The most serious form of this disorder is called hebephrenic dementia *praecox*. Individuals who suffer from it develop the most irrational of delusions, such as that of a man who was convinced that he had no heart, despite the fact that he admitted it was impossible to live without one. These patients deteriorate more rapidly than the others and offer the poorest prognosis. They regress to a lower level than that of the newborn infant, because they do not even respond emotionally. Ultimately they reach a vegetative level, at which they have no control of any of their faculties and are unable to take responsibility even for toilet habits.

Such mental deterioration represents the antithesis of that mental growth which is the objective of parents,

A Psychology of Growth

nurses, and physicians. Although they cannot alter a child's innate characteristics, they can ease the inevitable tensions that lead to mental and emotional distortion and, with proper care, they can help him to achieve his maximum development.

REFERENCES

1. CANNON, WALTER B., "Bodily Changes in Pain, Hunger, Fear and Rage," D. Appleton-Century Company, Inc., 1929.
2. DUNBAR, FLANDERS H., "Emotions and Bodily Changes," Columbia University Press, New York, 1938.

List of Visual Aids

The following list of visual aids can be used to supplement some of the material in this book. These films can be obtained from the producer or distributor listed with each title. (The addresses of these producers and distributors are given at the end of the bibliography.) In many cases these films can also be obtained from your local film library or local film distributor; also, many universities have large film libraries from which these films can be borrowed.

The running time (min) and whether it is silent (si) or sound (sd) are listed with each title. All those not listed as color (C) are black and white. All motion pictures are 16mm.

Each film has been listed once in connection with the chapter to which it is most applicable. However, in many cases the film might be used advantageously in connection with other chapters.

CHAPTER ONE — THE FOUNDATION OF MENTAL HEALTH

Life Begins (EBF 60min sd). Demonstrates individual growth patterns in different children; how children react to standardized test situations.

Infant Behavior: Early Stages (EBF 10min sd). Shows the activities and responses of an infant seated in a small chair; compares same infant at different stages.

Infant Behavior: Later Stages (EBF 10min sd). Demonstrates increasing ability of infant to use hands in manipulating objects.

List of Visual Aids

Posture and Locomotion (EBF 10min sd). Deals with the stages by which an infant advances from a helpless state to the stage where he is able to change position and posture at will; presents a study of these phases of child's development from age eight to eighty weeks, thirteen age levels are portrayed.

From Creeping to Walking (EBF 10min sd). Illustrates the correlation of abilities; continues the study begun in *Posture and Locomotion*.

Baby's Day at Twelve Weeks (EBF 10min sd). Follows an infant through his domestic day from time of awakening until final feeding at night; offers an interpretation of the significance of his various reactions.

Thirty-six Weeks Behavior (EBF 10min sd). Compares behavior now with that of infant at twelve weeks; comments upon responses to the ministrations of father and mother; first successful creeping efforts are observed.

Forty-eight Weeks Behavior (EBF 10min sd). Portrays wholesome methods of child care; emphasis is placed upon psychological implications and the educational significance of the infant's everyday experiences.

Behavior Patterns at One Year (EBF 10min sd). Attempts to clarify some of the principles which govern the learning process; discusses the possibilities and limitations of training infants from twenty-four to forty-eight weeks; also discusses relationships between age, growth, and learning, laws which determine learning and several learning problems.

Early Social Behavior (EBF 10min sd). Shows manifestations of infant personality in a variety of social settings.

Stages of Child Growth (EBF 20min sd). Dr. Charlotte Buhler of Vienna demonstrates methods for giving ac-

List of Visual Aids

complishment tests for infants and children of preschool age.

The Study of Infant Behavior (B&H 20min sd). Dr. Gessell's cinematographic record of reactions of infants in standardized situations.

Normal Child Development (Rutgers 15min si C). Genetic study of preschool child; responses to tests.

Reaching — Prehensive Behavior of Infant (Warden & Gilbert 15min si). Development of hand-eye coordination.

Reaction of Infant to Pinprick (Warden & Gilbert 15min si). Individuation of responses illustrated.

Reflex Behavior of Newborn Infant (Warden & Gilbert 7 min si). Illustrates Moro reflex, suspension grasp, crawling, stepping, and swimming.

Some Basic Differences in Newborn Infants during the Laying-in Period (NYU 23min si). Actual records of children from moment of birth; shows importance of mother's emotional adjustment to child for total development.

Modern Motherhood (Marvin 15min si). Development of emotional life of child during first year.

CHAPTER TWO — THE TWO-YEAR-OLD

Now I Am Two (Dept. of Labor 30min si). Story of a two-year-old's meals, play, and sleep.

This Is Robert (NYU 80min sd). Traces the development of an aggressive, "difficult" child from two years to seven years; shows reasons for aggressiveness and corrective procedures.

A Child Went Forth (NYU 20min sd). Pictures two- to

List of Visual Aids

seven-year-olds in a nursery camp; shows wide scope of activities and sympathetic guidance.

Bending the Twig (Ideal 15min si). Training the child in correct health and hygiene habits.

Play's the Thing (Dept. of Labor 15min si). How to make play equipment: toys and muscle coordination.

Finger Painting (NYU 20min sd). Demonstrates the use of plastic materials by young children; portrays differences that underlie personality patterns.

CHAPTER THREE — ADJUSTING TO ENVIRONMENT

Psychological Implications of Behavior during Clinical Visit (NYU 20min si). Shows how important clues to a child's emotional attitudes can be seen from its overt behavior during clinical visit; contrasts behavior of several children awaiting examination, during physical and dental examinations, during I.Q. testing, and at play.

Balloons: Aggression and Destructive Games (NYU 20min sd). Demonstrates special techniques in the diagnosis of normal personality of children; compares a normally aggressive, destructive boy with a suppressed normal boy.

Frustration Play Techniques (NYU 30min sd). Shows blocking games; frustration and hostility games; study of ego development and demarcation of self in young children.

Conflict Situations in Childhood (CFC 15min si). Describes the experimental and clinical techniques of Kurt Levin, an outstanding psychologist, in the study of behavior.

Not One Word (PSC 15min si). This is a study of jealousy. A subject with striking motor ability is com-

List of Visual Aids

pared with a subject of average ability, using numerous standardized mechanical tests.

CHAPTER FOUR — INTELLIGENCE

Measurement of Intelligence (CFC 15min sd). Demonstrates administration of the Stanford-Binet scale to a thirteen-year-old boy.

Testing the I.Q. (Warden & Gilbert 13min si). Shows administration of Form L to a five-year-old child; nature of test materials; scoring standards and calculation of the I.Q.

CHAPTER FIVE — MENTAL DEFICIENCY

Clinical Types of Mental Defectives (PSC 30min si C). Presents splendid illustrations of the main institutional types of mental deficiency.

Performance Testing (Minn 34 min si). Shows use of standard performance tests in examining both normal and feeble-minded children.

Institutional Training (Minn 15min si). Depicts activities of school and kindergarten at Faribault School for Feeble-minded.

Institutional Care of the Feeble-minded (Vineland 15min si). Modern institutional care of mental defectives is shown at Vineland Training School.

The Feeble-minded (Minn 60min si). Treats subject of feeble-mindedness from standpoint of pathology; mentions possible organic conditions causing feeble-mindedness; shows difference between morons, imbeciles, and idiots; describes eight major pathology groups.

Behavior of the Feeble-minded (Stoelting 10min si). Contrasts performance of two normal and two feeble-

List of Visual Aids

mininded subjects on the Healy and Fernald block-assembly test.

Deficiency in Finger Schema — Agnosia and Acalculia (PSC 11min si). Describes deficiencies in counting and localizing the fingers by some feeble-minded boys.

The Differentiation of Aphasia from Mental Deficiency in Children (Mitrano 12min si). Compares aphasic child with a feeble-minded youngster; shows discrepancies between verbal and manipulation tests and language development and social competence.

CHAPTER SIX — THE SCHOOL CHILD

Motor Aptitude Tests and Assembly Work (PSC 15min si). Demonstrates use of seven tests of motor aptitude with subjects possessing mediocre and exceptional abilities; compares assembly work.

Guidance Problem for School and Home (Columbia 20min sd). Case of a boy who has poor social adjustment; the attitude of his parents; and the role of his teacher.

Guidance in the Public Schools (EBF 20min sd). Shows some of the problems of organizing and administering guidance in public schools.

School (NYU 20min sd). Shows the work of a school pledged to develop self-reliance and good citizenship through self-government involving individual and group planning and executing, using the fifth-grade class as an example.

CHAPTER EIGHT — CAUSES OF BEHAVIOR PROBLEMS

Experimentally Produced Neurotic Behavior in Rats (PSC 15min si). Shows how rats develop abnormal (neurotic) behavior patterns when placed in frustrating situations.

List of Visual Aids

Cradle Song (NYU 10min sd). Reveals the damages of possessive devotion to child; leads to a discussion of why adults overprotect children and become overdependent on the love of children.

La Maternelle (NYU 20min sd). Story of a neglected child and her attempts at compensation, revealing physical tensions that may develop in a maladjusted child.

CHAPTER TWELVE — JUVENILE DELINQUENTS

As the Twig Is Bent (NYU 10min sd). The effect of good and bad home environment on the children of today; practical suggestions to parents on how to deal with many current youth problems.

Children of the City (NYU 30min sd). Shows how the problem of juvenile delinquency is approached through the child's home environment, using three cases of theft as an example.

Juvenile Delinquents (MOT 9min sd). Indicates the causes of crime and the development of juvenile delinquency; suggests measures which will reduce criminal delinquency.

A Criminal Is Born (TFC 21min sd). Shows the case history of three boys who develop criminal tendencies due to inadequate home life.

CHAPTER THIRTEEN — ADULTS

Behavior in Hypnotic Regression (PSC 15min si). Shows young woman in a deep hypnotic trance who is told she is a little girl again and experiencing her first memories; she behaves like a three-year-old, like a child starting school, and like other levels of growth.

Narcosynthesis (PSC 20min si). Shows use of drugs as aid in psychotherapy.

List of Visual Aids

Prefrontal Lobotomy in Chronic Schizophrenia (PSC 19min si). Illustrates the improvement that can be obtained in chronic schizophrenia by presenting four cases.

Athetoid Gestures in a Deteriorating Parergasic — Schizophrenic (PSC 6min si). Demonstrates contrasting schizophrenic motility disorders.

A Parergasic Reaction (Schizophrenia) in a Person of Low Intelligence (PSC 16min sd). Shows stereotypic grimaces and speech vagueness, etc.; comparative study of motility disorders.

Catatonic Behavior in a Deteriorated Parergasic (Schizophrenic) Patient (PSC 8min si). Shows posture, hypertrophied neck muscles, and ritualistic and stereotypic methods of eating.

Symptoms in Schizophrenia (PSC 15min si). Reviews common symptoms of schizophrenia as they are exhibited by patients in the average mental hospital.

GENERAL

A Better Tomorrow (NYU 20min sd). Story of children beginning with a preschool class through high school with emphasis on proper schools and training for different temperaments, intelligence, and abilities.

SOURCES OF FILMS LISTED ABOVE

B&H — Bell & Howell Company, 1801 Larchmont Ave., Chicago.

CFC — College Film Center, 84 E. Randolph St., Chicago 1.

Columbia Pictures Corp., 729 Seventh Ave., New York 19.
Department of Labor, Children's Bureau, Washington, D. C.

List of Visual Aids

- EBF — Encyclopedia Britannica Films, 20 N. Wacker Dr., Chicago 6.
- Ideal Pictures Corp., 28 E. Eighth St., Chicago 5.
- Marvin, Donn, Ossining, New York.
- Minn — University of Minnesota, Bureau of Visual Instruction, Minneapolis 14, Minn.
- Mitrano, A. J., 15 Glenbrook Ave., Park Hill, Yonkers, N. Y.
- MOT — March of Time, 369 Lexington Ave., New York 17.
- NYU — New York University, Film Library, Washington Square, New York 3.
- PSC — Pennsylvania State College, Psychological Cinema Register, State College, Pa.
- Rutgers Films, Rutgers University, Box 78, New Brunswick, N. J.
- Stoelting, C. H. Company, 424 N. Homan Ave., Chicago.
- TFC — Teaching Film Custodians, 25 W. 45th St., New York 18.
- Vineland Training School, Vineland, N. J.
- Warden & Gilbert, Psychological Laboratory, Columbia University, New York.

Index

A

- Accidents, physical, 37
- Adolescence, anxiety during, 162, 182
 - biological significance of, 166
 - description of, 158
 - emotional growth in, 165
 - glandular changes in, 160
 - growth changes of, 159
 - independence during, 169
 - inferiority during, 176
 - physical changes in, 159
 - problem in mind of, 167
 - school problems of, 178
 - sex problems of, 167
 - social concepts of, 179
 - weaning during, 173
- Adoption, 59
- Adults, 199
 - described, 200, 204, 206
 - position in time, 200
- Affection, 1, 3, 15, 16
- Aggression, 8, 23, 24
- Aldrich, C. A., 2, 10, 19
- Ancestry, 1, 2
- Anorexia nervosa, 155
- Anxiety states, in adults, 208, 213
 - in preadolescence, 150

B

- Bakwin, Harry, 63
- Behavior problems, causes of, 108
 - enuresis, 119
 - food, 128
 - of spoiled children, 138
 - stammering, 133

- Bender, Lauretta, 87, 91
- Bernfield, Siegfried, 109, 118
- Beverly, Bert I., 40
- Biological demands, 202
- Blanton, Smiley and Gray, Margaret, 136, 146
- Brill, A. A., 40, 90, 91, 144
- Brothers and sisters, 31

C

- Cannon, Walter B., 208, 222
- Carr-Saunders, A. M., 189, 198
- Chinese, attitude of, 27
- Chronological age, 46, 50
- College requirements, 178, 183
- Color sense, 20
- Comic books, 88
- Crying in infancy, 10, 16

D

- Delinquency, 72
 - (See also Adolescence)
- Dementia praecox, 219, 220
- Destructiveness, 3
- Deutsch, Helene, 19
- Discipline, 19, 22, 25, 26

E

- Education, health, 80, 91
 - progressive, 81, 82
- Encephalitis, 67
- Enuresis, 119
 - treatment of, 126
- Environment, 8, 202, 205
- Exhibitionism, 190

F

- Falling, sense of, 10

Index

Fears, 7, 8, 24, 25

- causes of, 92, 93, 96
- described, 92
- of illness, 97
- medical, 97, 98, 100
- treatment of, 95

Fernald, Grace, 63, 70

Food, 1, 13, 14, 21, 30, 80

(See also Hunger)

Force, 24, 25

Frank, Lawrence, 185

Frohlich's syndrome, 161

G

Germany, discipline in, 28

Gesell, Arnold, 14, 19, 43, 49, 61

Growth, potentialities of, 1, 7, 9, 11,
19, 47, 83, 108, 200, 202

H

Habit, 7, 21, 24, 35

Hahn, Eugene, 133, 146

Healey, William, 187, 189

Hospitals, 19

Hubbard, Elizabeth, 82, 91

Hunger, 10, 13, 14, 80

Hypothyroidism, 161

I

Imitation, 26

Independence, 85, 169

Individuality, 1, 6, 11, 83

Infancy, frustrations of, 177

Infant, 1, 4, 7, 8, 10, 14, 18, 201

Inferiority complex, 176

Insecurity, 173

Intelligence, 8, 11, 19, 41, 42, 44, 64,
84, 164, 180, 204

quotients of, 46, 47, 50

tests of, 11, 44, 50

Interests, 26

. 234 .

J

Japan, discipline in, 28

Jealousy, 31, 111

Juvenile delinquency, 186

causes of, 187

exhibitionism, 190

L

Laughing, 21

Learning, 24

Levy, David, 32, 142, 146

Lurie, Reginald, 87, 91

M

Manic-depressive psychosis, 218

Mearns, Hughes, 82, 91

Mechanical ability, 11

Menninger, Karl, 8, 19

Mental deficiency, 64

attitude toward, 68-70

causes of, 66, 67

incidence of, 72

relationship of, to delinquency,
72, 73

training, 76

Mental health, 1, 7, 28, 74, 179, 203

Merrill, Maud, 44

Moro reflex, 10

Mother substitute, 16, 18

Motion pictures, 87, 90, 206

Murchuson, Carl, 187, 197

Musical ability, 11, 52

N

Needs in growth, 4, 6, 7, 12, 14, 25,
29, 83, 179, 181, 202

Nurse as counselor, 173

Nursery school, 34

O

Obedience, 27

Orton, Samuel, 52, 63

P

- Paranoid individuals, 219
- Parents, 1, 2, 8, 9, 12, 16, 26, 28,
61, 69, 108, 111, 114, 116, 202
- Play, 19, 25, 27, 32, 33, 38, 39
adulthood in, 205
room for, 27
- Praise, 25
- Preadolescence, 88, 143, 147
anxieties of, 150
boys, 148
girls, 150
- Prejudice, 206
- Prize fights, 206
- Psychosis, 218
- Psychosomatic medicine, 4

R

- Radio, 87
- Reading difficulties, 52
- Reckless, Walter C., 188, 198
- Reflexes, 10, 11
- Reichenberg, Wally, 73, 78
- Relationship to others, 18, 20
- Resentment, 7, 8, 25, 28
- Responsibility, 21
- Rhythm, 1, 14, 15

S

- School nurse, 79, 81
- School problems, 53, 156, 139
during adolescence, 180, 181
- School teachers, 26, 81, 75
- Security, 1, 6, 13, 15, 18, 31, 34, 75,
89, 178, 181, 202
- Self-preservation, 7, 9, 34
- Self-propagation, 7
- Self-reliance, 7, 22, 36, 179, 202
- Sex education, 168, 180
books on, 198

Sexual aberrations, 218

- Shaw, Clifford and McKay, Henry,
188, 197
- Shimberg, Myra, 73, 78
- Sibling rivalry (*see* Jealousy)
- Simon-Binet, 4
- Smiling, 11
- Social concepts, 7, 9, 179
- Somatic medicine, 208
- Spaulding, Edith R., 187, 197
- Special abilities, 178
- Speech, 19, 20
- Spelling difficulties, 52
- Spoiling, 16, 95, 138
- Stammering, 133
- Standards, 1, 7, 9, 24, 87, 108, 202
- Stealing, 142
- Superstition, 208

T

- Talent, 2
- Terman, Louis, 44, 63
- Temperament, 1, 12, 22
- Thumb sucking, 10, 14, 29
- Toilet habits, 1, 17, 21, 29
- Tredgold, A.F., 78
- Two-year-old, 20

V

- Visual disturbances, 153, 155
- Vitality, 1, 205

W

- War, problems of, to adolescents,
184
games of, 86, 148
- Washburn, Carleton, 83, 85, 91
- Wile, Ira, 5, 68, 78
- Williams, Frankwood, 101, 106

